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## ABSTRACT

The data in these appendix tables show Federal R&D funding levels as reported by 95 agencies in the March-May period of 1978, following the President's budget message in January. All agencies with R&D programs were included. R&D totals are given in both outlays and obligations, and the R&D obligational data are distributed by character of work, field of science (for basic research and applied research), and Federal R&D support by states. Research performed at universities and colleges by fields of science is shown separately. R&D plant data are also provided. (Author/MP)

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## NOTES ON THE DATA

These tables have been derived from the *Federal Funds for Research, Development and Other Scientific Activities*, Volume XXVII survey. This survey represents a later and more detailed classification of the R&D portion of the Federal budget than the tables that appeared in one chapter of a volume of the 1979 budget—"Special Analysis P: Research and Development." The data in these appendix tables show R&D funding levels as reported by 95 agencies in the March-May period of 1978, following the President's budget message in January. All agencies with R&D programs were covered. R&D totals are given in both outlays and obligations, and the R&D obligational data are distributed by character of work, performer, field of science (for basic research and applied research), and Federal R&D support by States. Research performed at universities and colleges by fields of science is shown separately. R&D plant data are also provided.

The amounts reported for each year of this survey include the obligations or outlays incurred in that year, regardless of the time the funds may have been authorized or received by an agency and regardless of whether or not the funds are identified in an agency's budget specifically for research, development, or R&D plant.

In these tables data for 1977 are considered to be actual. Data for 1978 and 1979 are estimated since they do not represent final actions. **Since the timing of the Federal Funds survey coincided with the second quarter fiscal year 1978, the amounts reported for 1978 are subject to further apportionment and reprogramming decisions and the amounts reported for 1979 are subject to the whole cycle of congressional authorization and appropriation actions and subsequent Executive apportionment.** The effects of these actions will be reflected in later reports in this series.

It is important to note that judgement is often used by the agencies in classifying the data. Most R&D programs have to be separated by respondents from larger programs since they are not identified as budget-line items. Also, although agencies are provided with specific definitions, an element of

respondent judgment is involved in decisions as to which areas constitute basic research, applied research, and development or certain fields of science.

In the case of the Department of Defense (DOD) and the Department of Energy (DOE), the agencies have not been able to identify the headquarters costs of administering R&D programs, and to this extent full R&D costs are not reported. Also, R&D plant data are to some extent understated because of the difficulty encountered by some agencies in identifying R&D plant within contracts for research and development. DOD can identify only limited portions of R&D plant in contracts funded from the RDT&E appropriation. The National Aeronautics and Space Administration (NASA) faces similar problems in reporting R&D plant data.

Despite the fact that the differences between the *Federal Funds* requirements and agency internal reporting systems often call for judgment, the experience in reporting on the part of most agencies and their interaction over the years with the National Science Foundation (NSF) staff have worked to enhance the reliability of the data. Sometimes revisions in methods of reporting by an agency are important enough to warrant revisions of prior-year data by NSF, and therefore only the historical data contained in this appendix (tables C-110 through C-130) should be used and not those in previously published appendix tables.

The report, *Federal Funds for Research and Development*, Volume XXVII, will be published at a later date. It will contain an analysis of the R&D portion of the 1979 Federal budget, relating current levels to former levels and to recent budget totals, and comparing Federal R&D support with broader economic indicators. The report will also describe and analyze various aspects of current Federal R&D programs and will provide a number of summary tables and charts. It will not, however, include the detailed statistical tables contained in this appendix.

Inquiries relating to *Federal Funds*, Volume XXVII should be directed to the National Science Foundation, Division of Science Resources Studies, Washington, D.C. 20550. Telephone: (202) 634-4636.

# APPENDIX C

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## NOTES

- The title of the statistical tables and the final report formerly was *Federal Funds for Research, Development, and Other Scientific Activities*.
- Estimates for 1979 are based on the *Budget of the United States Government, Fiscal Year 1979* as submitted to Congress, and do not reflect subsequent appropriations and apportionment actions.
- Details may not add to totals because of rounding.
- Asterisks appearing in lieu of figures indicate that the amounts are less than \$50,000.
- The abbreviation "FFRDC's" appearing in statistical tables refers to federally funded research and development centers.
- In tables showing extramural performers, obligations to agricultural experiment stations are included within obligations to universities and colleges.
- Defense Agencies within the Department of Defense include the Defense Advanced Research Projects Agency, the Defense Nuclear Agency, the Defense Communications Agency, the Defense Mapping Agency, the Defense Logistics Agency, the Uniformed Services University of the Health Sciences, and technical support, Joint Chiefs of Staff.
- Departmentwide funds of the Department of Defense cover the Defense Civil Preparedness Agency.
- R&D data reported by the National Aeronautics and Space Administration are in terms of budget plan rather than obligations.
- Within the Department of Agriculture the Economics, Statistics, and Cooperatives Service includes the former Economic Research Service, Farmer Cooperative Service, and Statistical Reporting Service. Under the Science and Education Administration, Federal Research replaces the former Agricultural Research Service, and Cooperative Research replaces the former Cooperative State Research Service.

- Within the Department of Commerce the National Telecommunications and Information Administration includes the former Office of Telecommunications within Commerce and the former Office of Telecommunications Policy.
- Within the Department of Health, Education, and Welfare the Social and Rehabilitation Service (SRS) has been disbanded, and the new Health Care Financing Administration includes health-related research formerly within SRS as well as health and medical insurance research formerly within the Social Security Administration (SSA). The public assistance research of SRS has been transferred to SSA and to the former Office of Human Development, which is now Human Development Services.
- The Department of Energy includes the former Energy Research and Development Administration, parts of the Bureau of Mines and the Bonneville Power Administration from the Department of the Interior, and the Federal Energy Administration.
- Within the Department of the Interior, the name of the Bureau of Outdoor Recreation has been changed to the Heritage Conservation and Recreation Service.
- These appendix tables (Volume XXVII) providing data on R&D totals for 1969 and 1971 through 1976 are not comparable with totals for those years in appendix tables issued to accompany earlier *Federal Funds* reports. For example, R&D plant totals have changed for 1976. Basic research and applied research totals for 1974 and development totals for 1975 and 1976 have also been changed. Performer totals for 1974 through 1976 are likewise not comparable with data in earlier appendix tables. Totals for fields of science for basic research and applied research have also been changed for 1974.

**NOTE: For trend comparisons, use only these tables, Appendix C, for Volume XXVII and not any earlier ones.**

TABLE C-1. SUMMARY OF FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT:  
FISCAL YEARS 1977, 1978, AND 1979

(MILLIONS OF DOLLARS)

| ITEM                                                            | ACTUAL,<br>1977 | ESTIMATES |          |
|-----------------------------------------------------------------|-----------------|-----------|----------|
|                                                                 |                 | 1978      | 1979     |
| TOTAL OUTLAYS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT.....     | 23,363.5        | 26,147.9  | 28,145.5 |
| RESEARCH AND DEVELOPMENT.....                                   | 22,563.2        | 24,759.6  | 26,741.8 |
| R&D PLANT.....                                                  | 800.2           | 1,388.3   | 1,403.8  |
| TOTAL OBLIGATIONS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT..... | 25,296.3        | 28,086.9  | 29,320.0 |
| RESEARCH AND DEVELOPMENT.....                                   | 23,929.1        | 26,419.5  | 27,972.2 |
| PERFORMERS:                                                     |                 |           |          |
| FEDERAL INTRAMURAL(1).....                                      | 6,141.6         | 6,564.9   | 6,941.2  |
| INDUSTRIAL FIRMS.....                                           | 11,125.3        | 12,432.2  | 13,314.5 |
| FFRDOS ADMINISTERED BY INDUSTRIAL FIRMS.....                    | 1,112.7         | 1,179.6   | 1,201.9  |
| UNIVERSITIES AND COLLEGES.....                                  | 2,886.0         | 3,407.6   | 3,665.1  |
| FFRDOS ADMINISTERED BY UNIVERSITIES AND COLLEGES.....           | 1,326.8         | 1,282.7   | 1,325.6  |
| OTHER NONPROFIT INSTITUTIONS.....                               | 782.0           | 893.2     | 888.0    |
| FFRDOS ADMINISTERED BY NONPROFIT INSTITUTIONS.....              | 263.9           | 305.8     | 289.7    |
| STATE AND LOCAL GOVERNMENTS.....                                | 202.6           | 229.4     | 222.3    |
| FOREIGN.....                                                    | 88.2            | 124.0     | 123.9    |
| RESEARCH.....                                                   | 8,841.2         | 9,857.5   | 10,482.7 |
| PERFORMERS:                                                     |                 |           |          |
| FEDERAL INTRAMURAL(1).....                                      | 3,037.0         | 3,259.8   | 3,413.4  |
| INDUSTRIAL FIRMS.....                                           | 1,613.4         | 1,910.0   | 2,062.8  |
| FFRDOS ADMINISTERED BY INDUSTRIAL FIRMS.....                    | 199.4           | 229.9     | 255.3    |
| UNIVERSITIES AND COLLEGES.....                                  | 2,612.4         | 2,962.6   | 3,218.9  |
| FFRDOS ADMINISTERED BY UNIVERSITIES AND COLLEGES.....           | 671.2           | 662.9     | 696.2    |
| OTHER NONPROFIT INSTITUTIONS.....                               | 508.9           | 600.5     | 600.0    |
| FFRDOS ADMINISTERED BY NONPROFIT INSTITUTIONS.....              | 55.5            | 56.4      | 54.0     |
| STATE AND LOCAL GOVERNMENTS.....                                | 84.5            | 98.8      | 99.1     |
| FOREIGN.....                                                    | 58.7            | 76.7      | 83.0     |
| FIELDS OF SCIENCE:                                              |                 |           |          |
| LIFE SCIENCES.....                                              | 3,019.4         | 3,382.9   | 3,506.9  |
| PSYCHOLOGY.....                                                 | 159.1           | 177.9     | 200.3    |
| PHYSICAL SCIENCES.....                                          | 1,510.6         | 1,695.9   | 1,818.7  |
| ENVIRONMENTAL SCIENCES.....                                     | 921.0           | 1,011.8   | 1,109.5  |
| MATHEMATICS AND COMPUTER SCIENCES.....                          | 176.3           | 197.9     | 230.3    |
| ENGINEERING.....                                                | 2,425.9         | 2,665.0   | 2,791.3  |
| SOCIAL SCIENCES.....                                            | 443.3           | 530.0     | 556.9    |
| OTHER SCIENCES NEC.....                                         | 185.5           | 196.1     | 268.7    |
| BASIC RESEARCH.....                                             | 2,894.1         | 3,292.3   | 3,636.7  |
| PERFORMERS:                                                     |                 |           |          |
| FEDERAL INTRAMURAL(1).....                                      | 866.2           | 975.3     | 1,046.2  |
| INDUSTRIAL FIRMS.....                                           | 186.7           | 227.7     | 268.6    |
| FFRDOS ADMINISTERED BY INDUSTRIAL FIRMS.....                    | 47.7            | 49.8      | 54.5     |
| UNIVERSITIES AND COLLEGES.....                                  | 1,314.5         | 1,508.9   | 1,697.0  |
| FFRDOS ADMINISTERED BY UNIVERSITIES AND COLLEGES.....           | 323.4           | 346.0     | 373.0    |
| OTHER NONPROFIT INSTITUTIONS.....                               | 121.8           | 142.4     | 151.4    |
| FFRDOS ADMINISTERED BY NONPROFIT INSTITUTIONS.....              | 5.3             | 5.8       | 6.3      |
| STATE AND LOCAL GOVERNMENTS.....                                | 11.2            | 13.2      | 15.2     |
| FOREIGN.....                                                    | 17.4            | 23.4      | 24.4     |
| FIELDS OF SCIENCE:                                              |                 |           |          |
| LIFE SCIENCES.....                                              | 1,020.7         | 1,167.3   | 1,299.3  |
| PSYCHOLOGY.....                                                 | 54.2            | 63.8      | 74.1     |
| PHYSICAL SCIENCES.....                                          | 873.8           | 978.1     | 1,067.9  |
| ENVIRONMENTAL SCIENCES.....                                     | 456.1           | 511.9     | 566.7    |
| MATHEMATICS AND COMPUTER SCIENCES.....                          | 79.3            | 88.8      | 101.3    |
| ENGINEERING.....                                                | 303.1           | 345.5     | 374.3    |
| SOCIAL SCIENCES.....                                            | 94.5            | 117.2     | 128.5    |
| OTHER SCIENCES NEC.....                                         | 12.3            | 19.7      | 24.6     |
| APPLIED RESEARCH.....                                           | 5,947.1         | 6,565.2   | 6,845.9  |
| PERFORMERS:                                                     |                 |           |          |
| FEDERAL INTRAMURAL(1).....                                      | 2,170.8         | 2,284.6   | 2,367.2  |
| INDUSTRIAL FIRMS.....                                           | 1,424.9         | 1,682.3   | 1,794.2  |
| FFRDOS ADMINISTERED BY INDUSTRIAL FIRMS.....                    | 151.7           | 180.0     | 200.9    |
| UNIVERSITIES AND COLLEGES.....                                  | 1,297.9         | 1,453.8   | 1,521.8  |
| FFRDOS ADMINISTERED BY UNIVERSITIES AND COLLEGES.....           | 347.9           | 316.9     | 323.1    |
| OTHER NONPROFIT INSTITUTIONS.....                               | 387.2           | 458.1     | 448.5    |
| FFRDOS ADMINISTERED BY NONPROFIT INSTITUTIONS.....              | 50.2            | 50.6      | 47.7     |
| STATE AND LOCAL GOVERNMENTS.....                                | 73.3            | 85.6      | 83.9     |
| FOREIGN.....                                                    | 41.2            | 53.3      | 58.6     |
| FIELDS OF SCIENCE:                                              |                 |           |          |
| LIFE SCIENCES.....                                              | 1,998.7         | 2,215.6   | 2,207.6  |
| PSYCHOLOGY.....                                                 | 104.9           | 114.1     | 126.2    |
| PHYSICAL SCIENCES.....                                          | 636.7           | 717.9     | 750.8    |
| ENVIRONMENTAL SCIENCES.....                                     | 464.9           | 499.9     | 542.8    |
| MATHEMATICS AND COMPUTER SCIENCES.....                          | 97.0            | 109.1     | 129.0    |
| ENGINEERING.....                                                | 2,122.8         | 2,319.5   | 2,416.9  |
| SOCIAL SCIENCES.....                                            | 348.8           | 412.9     | 428.4    |
| OTHER SCIENCES NEC.....                                         | 173.2           | 176.4     | 244.1    |

TABLE C-1. SUMMARY OF FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT:  
FISCAL YEARS 1977, 1978, AND 1979

(MILLIONS OF DOLLARS)

- CONTINUED

| ITEM                                                  | ACTUAL,<br>1977 | ESTIMATES |          |
|-------------------------------------------------------|-----------------|-----------|----------|
|                                                       |                 | 1978      | 1979     |
| DEVELOPMENT.....                                      | 15,087.9        | 16,561.9  | 17,489.5 |
| PERFORMERS:                                           |                 |           |          |
| FEDERAL INTRAMURAL (1).....                           | 3,204.6         | 3,305.0   | 3,527.7  |
| INDUSTRIAL FIRMS.....                                 | 9,511.7         | 10,522.2  | 11,251.8 |
| FFRDCS ADMINISTERED BY INDUSTRIAL FIRMS.....          | 913.3           | 949.7     | 946.5    |
| UNIVERSITIES AND COLLEGES.....                        | 273.7           | 445.0     | 446.2    |
| FFRDCS ADMINISTERED BY UNIVERSITIES AND COLLEGES..... | 655.6           | 619.8     | 629.5    |
| OTHER NONPROFIT INSTITUTIONS.....                     | 273.1           | 292.7     | 288.0    |
| FFRDCS ADMINISTERED BY NONPROFIT INSTITUTIONS.....    | 208.4           | 249.4     | 235.8    |
| STATE AND LOCAL GOVERNMENTS.....                      | 118.2           | 130.7     | 123.2    |
| FOREIGN.....                                          | 29.5            | 47.4      | 40.8     |
| R&D PLANT.....                                        | 1,367.2         | 1,667.4   | 1,347.9  |
| PERFORMERS SUPPORTED:                                 |                 |           |          |
| FEDERAL INTRAMURAL.....                               | 711.9           | 642.0     | 467.2    |
| INDUSTRIAL FIRMS.....                                 | 103.4           | 298.8     | 231.4    |
| FFRDCS ADMINISTERED BY INDUSTRIAL FIRMS.....          | 215.8           | 259.9     | 181.5    |
| UNIVERSITIES AND COLLEGES.....                        | 33.7            | 53.0      | 60.5     |
| FFRDCS ADMINISTERED BY UNIVERSITIES AND COLLEGES..... | 277.8           | 399.6     | 391.8    |
| OTHER NONPROFIT INSTITUTIONS.....                     | 6.7             | 4.8       | 6.9      |
| FFRDCS ADMINISTERED BY NONPROFIT INSTITUTIONS.....    | 6.1             | 6.8       | 7.1      |
| STATE AND LOCAL GOVERNMENTS.....                      | .6              | 2.2       | .9       |
| FOREIGN.....                                          | 11.2            | .4        | .6       |

(1) COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS ARE COVERED AS WELL AS ACTUAL INTRAMURAL PERFORMANCE.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-2. FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                        | OBLIGATIONS |           |          | OUTLAYS  |           |          |
|---------------------------------------------------------------|-------------|-----------|----------|----------|-----------|----------|
|                                                               | 1977        | ESTIMATES |          | 1977     | ESTIMATES |          |
|                                                               |             | 1978      | 1979     |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                      | 25,296.3    | 28,086.9  | 29,320.0 | 23,363.5 | 26,147.9  | 28,145.5 |
| DEPARTMENTS                                                   |             |           |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                         | 559.9       | 665.1     | 651.2    | 537.8    | 640.1     | 605.3    |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....          | 30.5        | 34.8      | 35.8     | 30.5     | 34.7      | 35.8     |
| FOREST SERVICE.....                                           | 92.1        | 109.1     | 102.9    | 92.5     | 107.9     | 92.6     |
| SCIENCE AND EDUCATION ADMINISTRATION.....                     | 437.3       | 521.2     | 512.6    | 414.7    | 497.5     | 477.0    |
| COOPERATIVE RESEARCH.....                                     | 127.3       | 157.7     | 157.6    | 120.2    | 151.5     | 155.4    |
| FEDERAL RESEARCH.....                                         | 310.1       | 363.5     | 355.0    | 294.6    | 346.0     | 321.6    |
| DEPARTMENT OF COMMERCE, TOTAL.....                            | 251.8       | 296.9     | 319.3    | 238.2    | 277.0     | 301.4    |
| BUREAU OF THE CENSUS.....                                     | 2.6         | 3.3       | 3.8      | 2.5      | 3.3       | 3.7      |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....                      | 15.0        | 37.1      | 40.1     | 20.0     | 24.5      | 27.5     |
| MARITIME ADMINISTRATION.....                                  | 19.7        | 22.6      | 19.0     | 18.8     | 23.9      | 19.0     |
| NATIONAL BUREAU OF STANDARDS.....                             | 53.9        | 57.0      | 66.2     | 53.1     | 52.4      | 61.1     |
| NATIONAL FIRE PREVENTION AND CONTROL ADMINISTRATION.....      | 6.6         | 7.1       | 8.0      | 6.6      | 7.5       | 7.9      |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....          | 147.2       | 162.8     | 175.0    | 132.6    | 160.5     | 175.0    |
| NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION..... | 2.9         | 2.6       | 3.2      | 2.5      | 2.3       | 2.8      |
| OFFICE OF MINORITY BUSINESS ENTERPRISE.....                   | 3.4         | 4.0       | 3.6      | 1.6      | 2.1       | 3.9      |
| PATENT AND TRADEMARK OFFICE.....                              | .5          | .5        | .5       | .5       | .5        | .5       |
| DEPARTMENT OF DEFENSE, TOTAL.....                             | 41,409.0    | 42,125.8  | 43,052.1 | 40,308.0 | 41,381.6  | 42,408.8 |
| DEPARTMENT OF THE ARMY.....                                   | 2,458.2     | 2,635.0   | 2,871.0  | 2,195.0  | 2,448.9   | 2,735.9  |
| MILITARY FUNCTIONS.....                                       | 2,434.3     | 2,609.0   | 2,843.2  | 2,171.2  | 2,422.8   | 2,708.1  |
| RDTEE APPROPRIATIONS.....                                     | 2,330.8     | 2,477.7   | 2,706.2  | 2,069.2  | 2,304.0   | 2,575.0  |
| PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D.....          | 88.8        | 100.2     | 101.0    | 88.8     | 100.2     | 101.0    |
| MILITARY CONSTRUCTION.....                                    | 14.7        | 31.1      | 36.0     | 13.2     | 18.6      | 32.1     |
| CIVIL FUNCTIONS.....                                          | 23.9        | 26.1      | 27.8     | 23.9     | 26.1      | 27.8     |
| DEPARTMENT OF THE NAVY.....                                   | 3,878.6     | 4,117.5   | 4,596.8  | 3,582.6  | 3,910.7   | 4,304.2  |
| RDTEE APPROPRIATIONS.....                                     | 3,776.6     | 4,006.0   | 4,471.0  | 3,480.5  | 3,800.0   | 4,184.0  |
| PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D.....          | 80.7        | 95.6      | 96.0     | 80.7     | 95.6      | 96.0     |
| MILITARY CONSTRUCTION.....                                    | 18.5        | 12.5      | 21.4     | 18.5     | 12.5      | 21.4     |
| SPECIAL FOREIGN CURRENCY PROGRAM.....                         | 2.8         | 3.4       | 8.4      | 2.9      | 2.6       | 2.8      |
| DEPARTMENT OF THE AIR FORCE.....                              | 4,381.1     | 4,579.2   | 4,660.6  | 3,902.2  | 4,336.5   | 4,509.3  |
| RDTEE APPROPRIATIONS.....                                     | 3,825.2     | 4,169.7   | 4,398.3  | 3,618.5  | 3,927.0   | 4,247.0  |
| PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D.....          | 243.7       | 263.0     | 256.3    | 243.7    | 263.0     | 256.3    |
| MILITARY CONSTRUCTION.....                                    | 312.2       | 146.5     | 6.0      | 40.0     | 146.5     | 6.0      |
| DEFENSE AGENCIES.....                                         | 659.5       | 760.3     | 891.4    | 610.5    | 664.0     | 828.0    |
| RDTEE APPROPRIATIONS.....                                     | 659.5       | 760.3     | 891.4    | 610.5    | 664.0     | 828.0    |
| DEPARTMENTWIDE FUNDS.....                                     | 1.3         | 6.9       | 5.2      | 1.2      | 2.6       | 4.4      |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....                 | 30.2        | 27.0      | 27.0     | 16.5     | 19.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                     | 4,097.2     | 5,135.2   | 4,965.7  | 3,593.1  | 4,441.3   | 4,797.0  |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....      | 2,920.0     | 3,219.5   | 3,323.4  | 2,622.2  | 3,001.9   | 3,228.4  |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION.....     | 153.0       | 163.4     | 203.2    | 167.2    | 173.1     | 198.9    |
| CENTER FOR DISEASE CONTROL.....                               | 55.3        | 62.7      | 63.1     | 42.6     | 52.9      | 57.6     |
| FOOD AND DRUG ADMINISTRATION.....                             | 43.7        | 51.8      | 50.4     | 28.6     | 27.7      | 31.3     |
| HEALTH CARE FINANCING ADMINISTRATION.....                     | 30.0        | 35.1      | 38.6     | 30.0     | 35.1      | 38.6     |
| HEALTH RESOURCES ADMINISTRATION.....                          | 7.4         | 5.0       | -        | 1.4      | 2.3       | -        |
| HEALTH SERVICES ADMINISTRATION.....                           | 17.7        | 17.0      | 17.2     | 15.6     | 15.4      | 15.7     |
| HUMAN DEVELOPMENT SERVICES.....                               | 76.8        | 79.0      | 85.7     | 80.0     | 79.4      | 82.7     |
| NATIONAL INSTITUTE OF EDUCATION.....                          | 64.9        | 84.6      | 94.4     | 59.7     | 73.6      | 84.8     |
| NATIONAL INSTITUTES OF HEALTH.....                            | 2,375.7     | 2,605.1   | 2,657.4  | 2,105.0  | 2,457.9   | 2,614.8  |
| OFFICE OF EDUCATION.....                                      | 31.1        | 32.4      | 33.1     | 30.3     | 31.2      | 32.1     |
| OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATION.....          | 1.0         | 1.0       | 1.0      | 1.7      | 1.6       | 1.6      |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....             | 32.2        | 39.5      | 37.2     | 28.1     | 13.5      | 28.9     |
| OFFICE OF THE SECRETARY.....                                  | 20.0        | 30.0      | 27.0     | 21.3     | 25.9      | 27.6     |
| SOCIAL SECURITY ADMINISTRATION.....                           | 11.2        | 13.1      | 15.1     | 10.9     | 12.2      | 13.8     |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....              | 52.1        | 68.5      | 69.0     | 69.0     | 66.6      | 64.0     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                        | 301.2       | 390.2     | 362.4    | 287.8    | 352.8     | 361.9    |
| BUREAU OF LAND MANAGEMENT.....                                | .9          | 1.2       | 1.1      | .9       | 1.2       | 1.1      |
| BUREAU OF MINES.....                                          | 105.3       | 130.6     | 103.0    | 103.7    | 106.8     | 110.8    |
| BUREAU OF RECLAMATION.....                                    | 9.9         | 11.6      | 7.2      | 10.1     | 12.0      | 7.2      |
| GEOLOGICAL SURVEY.....                                        | 128.9       | 162.6     | 173.5    | 123.2    | 160.8     | 171.5    |
| HERITAGE CONSERVATION AND RECREATION SERVICE.....             | -           | -         | -        | -        | -         | -        |
| NATIONAL PARK SERVICE.....                                    | 7.8         | 9.9       | 10.5     | 7.6      | 9.6       | 10.2     |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT.....     | -           | 7.8       | 2.7      | -        | 3.0       | 2.0      |
| OFFICE OF THE SECRETARY.....                                  | 4.5         | 3.3       | 2.5      | 1.0      | 3.2       | 2.3      |
| OFFICE OF WATER RESEARCH AND TECHNOLOGY.....                  | 16.0        | 26.7      | 28.9     | 14.2     | 20.9      | 25.1     |
| UNITED STATES FISH AND WILDLIFE SERVICE.....                  | 27.8        | 36.6      | 33.0     | 27.1     | 35.2      | 31.5     |

CONTINUED ON NEXT PAGE

TABLE C-2. FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

- CONTINUED

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                  | OBLIGATIONS |           |         | OUTLAYS |           |         |
|---------------------------------------------------------|-------------|-----------|---------|---------|-----------|---------|
|                                                         | 1977        | ESTIMATES |         | 1977    | ESTIMATES |         |
|                                                         |             | 1978      | 1979    |         | 1978      | 1979    |
| DEPARTMENT OF JUSTICE, TOTAL.....                       | 27.7        | 67.5      | 42.1    | 33.7    | 43.5      | 41.0    |
| BUREAU OF PRISONS.....                                  | 1.1         | 3.4       | 3.0     | 1.0     | 2.3       | 3.1     |
| DRUG ENFORCEMENT ADMINISTRATION.....                    | 3.0         | 5.8       | 2.3     | 3.8     | 3.7       | 2.3     |
| FEDERAL BUREAU OF INVESTIGATION.....                    | 1.4         | 1.8       | 1.3     | 1.1     | 2.6       | 1.4     |
| IMMIGRATION AND NATURALIZATION SERVICE.....             | .3          | .6        | .4      | .2      | .6        | .4      |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....          | 21.8        | 53.9      | 33.1    | 27.6    | 32.7      | 32.2    |
| OFFICE OF THE ATTORNEY GENERAL.....                     | -           | 2.0       | 2.0     | -       | 1.6       | 1.6     |
| DEPARTMENT OF LABOR, TOTAL.....                         | 29.6        | 32.2      | 32.1    | 28.1    | 32.1      | 31.9    |
| BUREAU OF LABOR STATISTICS.....                         | 1.4         | 1.2       | .9      | 1.4     | 1.2       | .9      |
| EMPLOYMENT AND TRAINING ADMINISTRATION.....             | 16.8        | 17.7      | 14.3    | 16.8    | 17.7      | 14.3    |
| EMPLOYMENT STANDARDS ADMINISTRATION.....                | 4.4         | 5.6       | 5.6     | 4.3     | 5.6       | 5.6     |
| LABOR-MANAGEMENT SERVICES ADMINISTRATION.....           | 3.3         | 3.0       | 3.1     | 1.9     | 2.9       | 2.9     |
| OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.....      | 3.4         | 4.5       | 6.5     | 3.4     | 4.5       | 6.5     |
| OFFICE OF THE SECRETARY.....                            | .2          | .2        | 1.7     | .2      | .2        | 1.7     |
| DEPARTMENT OF STATE, TOTAL.....                         | 77.6        | 63.7      | 90.3    | 44.1    | 66.6      | 88.6    |
| DEPARTMENTAL FUNDS.....                                 | 2.3         | 2.9       | 2.8     | 2.3     | 2.9       | 2.8     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....               | 75.3        | 60.8      | 87.5    | 41.8    | 63.6      | 85.9    |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                | 377.1       | 437.1     | 392.8   | 363.5   | 398.6     | 387.4   |
| FEDERAL AVIATION ADMINISTRATION.....                    | 106.4       | 130.6     | 106.9   | 102.8   | 125.7     | 110.9   |
| FEDERAL HIGHWAY ADMINISTRATION.....                     | 55.9        | 56.1      | 58.9    | 53.0    | 56.5      | 64.8    |
| FEDERAL RAILROAD ADMINISTRATION.....                    | 58.5        | 75.9      | 55.7    | 57.3    | 63.8      | 53.0    |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....     | 47.2        | 48.3      | 52.9    | 49.5    | 51.2      | 51.2    |
| OFFICE OF THE SECRETARY.....                            | 28.0        | 35.3      | 15.9    | 31.8    | 31.2      | 19.5    |
| RESEARCH AND SPECIAL PROGRAM DIRECTORATE.....           | -           | .9        | 13.9    | -       | .9        | 9.4     |
| UNITED STATES COAST GUARD.....                          | 19.5        | 20.0      | 20.0    | 17.0    | 18.0      | 18.0    |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....           | 61.6        | 70.0      | 68.6    | 52.1    | 51.3      | 60.6    |
| DEPARTMENT OF THE TREASURY, TOTAL.....                  | 4.9         | 6.9       | 7.8     | 5.0     | 6.7       | 8.1     |
| BUREAU OF ALCOHOL, TOBACCO AND FIREARMS.....            | 1.1         | 2.3       | 2.6     | 1.1     | 2.3       | 2.6     |
| BUREAU OF ENGRAVING AND PRINTING.....                   | 2.5         | 2.7       | 3.2     | 2.5     | 2.7       | 3.2     |
| CUSTOMS SERVICE.....                                    | 1.3         | 1.9       | 2.1     | 1.4     | 1.7       | 2.3     |
| OTHER AGENCIES                                          |             |           |         |         |           |         |
| ACTION.....                                             | .5          | 1.3       | 5.6     | .4      | 1.0       | 4.3     |
| ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS..... | 1.5         | 1.7       | 1.7     | 1.3     | 1.6       | 1.7     |
| APPALACHIAN REGIONAL COMMISSION.....                    | .7          | .8        | .8      | .6      | .8        | .8      |
| CIVIL AERONAUTICS BOARD.....                            | .5          | .7        | .8      | .5      | .7        | .8      |
| CIVIL SERVICE COMMISSION.....                           | 3.9         | 4.3       | 4.3     | 3.9     | 4.3       | 4.3     |
| COMMUNITY SERVICES ADMINISTRATION.....                  | 24.0        | 21.5      | 27.0    | 21.0    | 14.5      | 24.0    |
| CONSUMER PRODUCT SAFETY COMMISSION.....                 | 6.7         | 4.6       | 5.0     | 6.8     | 4.8       | 4.7     |
| ENVIRONMENTAL PROTECTION AGENCY.....                    | 297.6       | 334.3     | 332.6   | 283.0   | 312.6     | 315.7   |
| FEDERAL COMMUNICATIONS COMMISSION.....                  | 2.0         | 3.0       | 3.4     | 1.9     | 2.7       | 3.2     |
| FEDERAL HOME LOAN BANK BOARD.....                       | 1.7         | 1.1       | 1.3     | 1.7     | 1.1       | 1.3     |
| FEDERAL TRADE COMMISSION.....                           | 1.1         | 1.3       | 1.3     | 1.1     | 1.3       | 1.3     |
| GENERAL SERVICES ADMINISTRATION.....                    | .9          | 2.2       | 1.1     | .9      | 2.2       | 1.1     |
| INTERNATIONAL COMMUNICATION AGENCY.....                 | .1          | .2        | .1      | .1      | .2        | .1      |
| INTERSTATE COMMERCE COMMISSION.....                     | .1          | .2        | .1      | .1      | .2        | .1      |
| LIBRARY OF CONGRESS.....                                | 3.8         | 4.3       | 4.7     | 3.6     | 4.4       | 4.6     |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....      | 3,821.5     | 4,038.8   | 4,345.0 | 3,945.3 | 3,981.6   | 4,270.1 |
| NATIONAL SCIENCE FOUNDATION.....                        | 724.1       | 790.2     | 867.6   | 674.7   | 749.8     | 784.7   |
| NUCLEAR REGULATORY COMMISSION.....                      | 119.4       | 140.0     | 163.5   | 107.8   | 130.5     | 153.0   |
| SMALL BUSINESS ADMINISTRATION.....                      | .5          | -         | .1      | .5      | -         | .1      |
| SMITHSONIAN INSTITUTION.....                            | 29.8        | 33.3      | 34.6    | 30.1    | 32.8      | 34.6    |
| TENNESSEE VALLEY AUTHORITY.....                         | 30.2        | 66.0      | 83.7    | 30.2    | 66.0      | 83.7    |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....  | 2.2         | 2.6       | 3.7     | 2.2     | 2.6       | 3.4     |
| UNITED STATES INTERNATIONAL TRADE COMMISSION.....       | 2.6         | 2.6       | 2.7     | 2.6     | 2.6       | 2.7     |
| VETERANS ADMINISTRATION.....                            | 112.9       | 123.1     | 121.4   | 112.8   | 121.0     | 121.4   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-3. FEDERAL FUNDS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979  
(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                        | OBLIGATIONS |           |          | OUTLAYS  |           |          |
|---------------------------------------------------------------|-------------|-----------|----------|----------|-----------|----------|
|                                                               | 1977        | ESTIMATES |          | 1977     | ESTIMATES |          |
|                                                               |             | 1978      | 1979     |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                      | 23,929.1    | 26,419.5  | 27,972.2 | 22,563.2 | 24,759.6  | 26,741.8 |
| DEPARTMENTS                                                   |             |           |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                         | 547.0       | 632.5     | 636.0    | 515.3    | 603.6     | 583.6    |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....          | 30.5        | 34.8      | 35.8     | 30.5     | 34.7      | 35.8     |
| FOREST SERVICE.....                                           | 90.3        | 106.5     | 102.9    | 89.0     | 104.4     | 91.8     |
| SCIENCE AND EDUCATION ADMINISTRATION.....                     | 426.2       | 491.2     | 497.4    | 395.7    | 464.4     | 456.0    |
| COOPERATIVE RESEARCH.....                                     | 127.3       | 157.7     | 157.6    | 120.1    | 151.5     | 155.4    |
| FEDERAL RESEARCH.....                                         | 298.9       | 333.5     | 339.8    | 275.6    | 313.0     | 300.7    |
| DEPARTMENT OF COMMERCE, TOTAL.....                            | 244.7       | 287.7     | 315.1    | 232.5    | 269.6     | 297.3    |
| BUREAU OF THE CENSUS.....                                     | 2.6         | 3.3       | 3.8      | 2.5      | 3.3       | 3.7      |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....                      | 15.0        | 37.1      | 40.1     | 20.0     | 24.5      | 27.5     |
| MARITIME ADMINISTRATION.....                                  | 14.8        | 17.7      | 15.0     | 15.1     | 20.2      | 16.0     |
| NATIONAL BUREAU OF STANDARDS.....                             | 53.2        | 55.0      | 66.0     | 52.6     | 51.0      | 60.0     |
| NATIONAL FIRE PREVENTION AND CONTROL ADMINISTRATION.....      | 6.6         | 7.1       | 8.0      | 6.6      | 7.5       | 7.9      |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....          | 145.7       | 160.5     | 175.0    | 131.2    | 158.2     | 175.0    |
| NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION..... | 2.9         | 2.6       | 3.2      | 2.5      | 2.3       | 2.8      |
| OFFICE OF MINORITY BUSINESS ENTERPRISE.....                   | 3.4         | 4.0       | 3.6      | 1.6      | 2.1       | 3.9      |
| PATENT AND TRADEMARK OFFICE.....                              | .5          | .5        | .5       | .5       | .5        | .5       |
| DEPARTMENT OF DEFENSE, TOTAL.....                             | 10,963.4    | 11,824.7  | 12,837.7 | 10,182.4 | 10,982.9  | 12,047.5 |
| DEPARTMENT OF THE ARMY.....                                   | 2,441.9     | 2,602.1   | 2,833.1  | 2,180.2  | 2,428.5   | 2,701.9  |
| MILITARY FUNCTIONS.....                                       | 2,418.0     | 2,576.1   | 2,805.3  | 2,156.4  | 2,402.4   | 2,674.1  |
| RD&E APPROPRIATIONS.....                                      | 2,329.2     | 2,475.9   | 2,704.3  | 2,067.6  | 2,302.2   | 2,573.1  |
| PAY AND ALLOWANCES OF MILITARY PERSONNEL IN RD.....           | 88.8        | 100.2     | 101.0    | 85.8     | 100.2     | 101.0    |
| CIVIL FUNCTIONS.....                                          | 23.9        | 26.1      | 27.8     | 23.9     | 26.1      | 27.8     |
| DEPARTMENT OF THE NAVY.....                                   | 3,817.4     | 4,056.6   | 4,501.9  | 3,519.0  | 3,845.5   | 4,216.0  |
| RD&E APPROPRIATIONS.....                                      | 3,733.9     | 3,957.6   | 4,397.5  | 3,435.4  | 3,747.3   | 4,117.2  |
| PAY AND ALLOWANCES OF MILITARY PERSONNEL IN RD.....           | 80.7        | 95.6      | 96.0     | 80.7     | 95.6      | 96.0     |
| SPECIAL FOREIGN CURRENCY PROGRAM.....                         | 2.8         | 3.4       | 8.4      | 2.9      | 2.6       | 2.8      |
| DEPARTMENT OF THE AIR FORCE.....                              | 4,031.1     | 4,399.2   | 4,615.6  | 3,862.2  | 4,036.5   | 4,287.3  |
| RD&E APPROPRIATIONS.....                                      | 3,787.4     | 4,136.2   | 4,359.3  | 3,618.5  | 3,773.5   | 4,031.0  |
| PAY AND ALLOWANCES OF MILITARY PERSONNEL IN RD.....           | 243.7       | 263.0     | 256.3    | 243.7    | 263.0     | 256.3    |
| DEFENSE AGENCIES.....                                         | 641.4       | 733.0     | 854.8    | 603.3    | 650.9     | 810.9    |
| RD&E APPROPRIATIONS.....                                      | 641.4       | 733.0     | 854.8    | 603.3    | 650.9     | 810.9    |
| DEPARTMENTWIDE FUNDS.....                                     | 1.3         | 6.9       | 5.2      | 1.2      | 2.5       | 4.4      |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....                 | 30.2        | 27.0      | 27.0     | 16.5     | 19.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                     | 3,536.2     | 4,195.8   | 4,175.0  | 3,166.0  | 3,849.4   | 4,136.3  |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....      | 2,787.3     | 3,131.5   | 3,271.1  | 2,576.6  | 2,907.9   | 3,142.8  |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION.....     | 153.0       | 163.0     | 203.2    | 167.2    | 173.0     | 198.7    |
| CENTER FOR DISEASE CONTROL.....                               | 55.3        | 62.7      | 63.1     | 42.6     | 52.9      | 57.6     |
| FOOD AND DRUG ADMINISTRATION.....                             | 42.9        | 48.6      | 49.1     | 24.4     | 26.0      | 26.5     |
| HEALTH CARE FINANCING ADMINISTRATION.....                     | 30.0        | 35.1      | 38.6     | 30.0     | 35.1      | 38.6     |
| HEALTH RESOURCES ADMINISTRATION.....                          | 7.4         | 5.0       | -        | 1.4      | 2.3       | -        |
| HEALTH SERVICES ADMINISTRATION.....                           | 17.7        | 17.0      | 17.2     | 15.6     | 15.4      | 15.7     |
| HUMAN DEVELOPMENT SERVICES.....                               | 76.8        | 79.0      | 85.7     | 80.0     | 79.4      | 82.7     |
| NATIONAL INSTITUTE OF EDUCATION.....                          | 64.9        | 84.6      | 94.4     | 59.7     | 73.6      | 84.8     |
| NATIONAL INSTITUTES OF HEALTH.....                            | 2,243.9     | 2,520.6   | 2,606.3  | 2,063.7  | 2,365.8   | 2,534.2  |
| OFFICE OF EDUCATION.....                                      | 31.1        | 32.4      | 33.1     | 30.3     | 31.2      | 32.1     |
| OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATION.....          | 1.0         | 1.0       | 1.0      | 1.7      | 1.6       | 1.6      |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....             | 32.2        | 39.5      | 37.2     | 28.1     | 13.5      | 23.9     |
| OFFICE OF THE SECRETARY.....                                  | 20.0        | 30.0      | 27.0     | 21.3     | 25.9      | 27.6     |
| SOCIAL SECURITY ADMINISTRATION.....                           | 11.2        | 13.1      | 15.1     | 10.9     | 12.2      | 13.8     |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....              | 52.1        | 68.5      | 69.0     | 69.0     | 66.6      | 64.0     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                        | 296.3       | 372.3     | 359.4    | 283.3    | 339.4     | 357.1    |
| BUREAU OF LAND MANAGEMENT.....                                | .9          | 1.2       | 1.1      | .9       | 1.2       | 1.1      |
| BUREAU OF MINES.....                                          | 101.9       | 121.3     | 103.0    | 100.7    | 101.5     | 108.5    |
| BUREAU OF RECLAMATION.....                                    | 9.9         | 11.6      | 7.2      | 10.1     | 12.0      | 7.2      |
| GEOLOGICAL SURVEY.....                                        | 128.9       | 162.6     | 173.5    | 123.2    | 160.8     | 171.5    |
| HERITAGE CONSERVATION AND RECREATION SERVICE.....             | -           | -         | -        | -        | -         | -        |
| NATIONAL PARK SERVICE.....                                    | 7.8         | 9.9       | 10.5     | 7.6      | 9.6       | 10.2     |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT.....     | -           | 7.8       | 2.7      | -        | 3.0       | 2.0      |
| OFFICE OF THE SECRETARY.....                                  | 4.5         | 3.3       | 2.5      | 1.0      | 3.2       | 2.3      |
| OFFICE OF WATER RESEARCH AND TECHNOLOGY.....                  | 15.1        | 25.6      | 27.7     | 13.3     | 19.9      | 23.9     |
| UNITED STATES FISH AND WILDLIFE SERVICE.....                  | 27.2        | 29.1      | 31.3     | 26.5     | 28.2      | 30.2     |

CONTINUED ON NEXT PAGE



TABLE C-3. FEDERAL FUNDS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

- CONTINUED

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                  | OBLIGATIONS |           |         | OUTLAYS |           |         |
|---------------------------------------------------------|-------------|-----------|---------|---------|-----------|---------|
|                                                         | 1977        | ESTIMATES |         | 1977    | ESTIMATES |         |
|                                                         |             | 1978      | 1979    |         | 1978      | 1979    |
| DEPARTMENT OF JUSTICE, TOTAL.....                       | 27.7        | 67.5      | 42.1    | 33.7    | 43.5      | 41.0    |
| BUREAU OF PRISONS.....                                  | 1.1         | 3.4       | 3.0     | 1.0     | 2.3       | 3.1     |
| DRUG ENFORCEMENT ADMINISTRATION.....                    | 3.0         | 5.8       | 2.3     | 3.8     | 3.7       | 2.3     |
| FEDERAL BUREAU OF INVESTIGATION.....                    | 1.4         | 1.8       | 1.3     | 1.1     | 2.6       | 1.4     |
| IMMIGRATION AND NATURALIZATION SERVICE.....             | .3          | .6        | .4      | .2      | .6        | .4      |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....          | 21.8        | 53.9      | 33.1    | 27.6    | 32.7      | 32.2    |
| OFFICE OF THE ATTORNEY GENERAL.....                     | -           | 2.0       | 2.0     | -       | 1.6       | 1.6     |
| DEPARTMENT OF LABOR, TOTAL.....                         | 29.6        | 32.2      | 32.1    | 28.1    | 32.1      | 31.9    |
| BUREAU OF LABOR STATISTICS.....                         | 1.4         | 1.2       | .9      | 1.4     | 1.2       | .9      |
| EMPLOYMENT AND TRAINING ADMINISTRATION.....             | 16.8        | 17.7      | 14.3    | 16.8    | 17.7      | 14.3    |
| EMPLOYMENT STANDARDS ADMINISTRATION.....                | 4.4         | 5.6       | 5.6     | 4.3     | 5.6       | 5.6     |
| LABOR-MANAGEMENT SERVICES ADMINISTRATION.....           | 3.3         | 3.0       | 3.1     | 1.9     | 2.9       | 2.9     |
| OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.....      | 3.4         | 4.5       | 6.5     | 3.4     | 4.5       | 6.5     |
| OFFICE OF THE SECRETARY.....                            | .2          | .2        | 1.7     | .2      | .2        | 1.7     |
| DEPARTMENT OF STATE, TOTAL.....                         | 61.4        | 62.9      | 84.4    | 40.1    | 62.6      | 81.6    |
| DEPARTMENTAL FUNDS.....                                 | 2.3         | 2.9       | 2.8     | 2.3     | 2.9       | 2.8     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....               | 59.1        | 60.0      | 81.7    | 37.8    | 59.6      | 78.9    |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                | 354.6       | 407.5     | 372.2   | 346.0   | 374.0     | 369.0   |
| FEDERAL AVIATION ADMINISTRATION.....                    | 103.4       | 121.0     | 106.3   | 99.8    | 117.1     | 109.4   |
| FEDERAL HIGHWAY ADMINISTRATION.....                     | 55.5        | 55.7      | 57.6    | 52.6    | 56.1      | 63.5    |
| FEDERAL RAILROAD ADMINISTRATION.....                    | 41.9        | 59.0      | 39.7    | 45.6    | 50.8      | 40.0    |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....     | 47.0        | 48.1      | 52.7    | 49.3    | 51.0      | 51.0    |
| OFFICE OF THE SECRETARY.....                            | 28.0        | 35.3      | 15.9    | 31.8    | 31.2      | 19.5    |
| RESEARCH AND SPECIAL PROGRAM DIRECTORATE.....           | -           | .9        | 13.9    | -       | .9        | 9.4     |
| UNITED STATES COAST GUARD.....                          | 18.9        | 19.2      | 19.2    | 16.5    | 17.3      | 17.3    |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....           | 59.9        | 68.3      | 66.9    | 50.4    | 49.4      | 58.9    |
| DEPARTMENT OF THE TREASURY, TOTAL.....                  | 4.8         | 6.4       | 7.8     | 4.9     | 6.7       | 8.0     |
| BUREAU OF ALCOHOL, TOBACCO AND FIREARMS.....            | 1.1         | 2.3       | 2.6     | 1.1     | 2.3       | 2.6     |
| BUREAU OF ENGRAVING AND PRINTING.....                   | 2.5         | 2.7       | 3.2     | 2.5     | 2.7       | 3.2     |
| CUSTOMS SERVICE.....                                    | 1.2         | 1.9       | 2.0     | 1.3     | 1.7       | 2.2     |
| OTHER AGENCIES                                          |             |           |         |         |           |         |
| ACTION.....                                             | .5          | 1.3       | 5.6     | .4      | 1.0       | 4.3     |
| ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS..... | 1.5         | 1.7       | 1.7     | 1.3     | 1.6       | 1.7     |
| APPALACHIAN REGIONAL COMMISSION.....                    | .7          | .8        | .8      | .6      | .8        | .8      |
| CIVIL AERONAUTICS BOARD.....                            | .5          | .7        | .8      | .5      | .7        | .8      |
| CIVIL SERVICE COMMISSION.....                           | 3.9         | 4.3       | 4.3     | 3.9     | 4.3       | 4.3     |
| COMMUNITY SERVICES ADMINISTRATION.....                  | 24.0        | 21.5      | 27.0    | 21.0    | 14.5      | 24.0    |
| CONSUMER PRODUCT SAFETY COMMISSION.....                 | 6.7         | 4.2       | 5.0     | 6.8     | 4.5       | 4.7     |
| ENVIRONMENTAL PROTECTION AGENCY.....                    | 295.5       | 331.0     | 330.0   | 281.3   | 310.0     | 313.0   |
| FEDERAL COMMUNICATIONS COMMISSION.....                  | 2.0         | 3.0       | 3.4     | 1.9     | 2.7       | 3.2     |
| FEDERAL HOME LOAN BANK BOARD.....                       | 1.7         | 1.1       | 1.3     | 1.7     | 1.1       | 1.3     |
| FEDERAL TRADE COMMISSION.....                           | 1.1         | 1.3       | 1.3     | 1.1     | 1.3       | 1.3     |
| GENERAL SERVICES ADMINISTRATION.....                    | .9          | 2.2       | 1.1     | .9      | 2.2       | 1.1     |
| INTERNATIONAL COMMUNICATION AGENCY.....                 | .1          | .2        | .1      | .1      | .2        | .1      |
| INTERSTATE COMMERCE COMMISSION.....                     | .1          | .2        | .1      | .1      | .2        | .1      |
| LIBRARY OF CONGRESS.....                                | 3.8         | 4.3       | 4.7     | 3.6     | 4.4       | 4.6     |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....      | 3,703.4     | 3,876.5   | 4,192.5 | 3,840.3 | 3,849.1   | 4,116.1 |
| NATIONAL SCIENCE FOUNDATION.....                        | 697.0       | 753.6     | 828.7   | 649.6   | 715.3     | 749.1   |
| NUCLEAR REGULATORY COMMISSION.....                      | 112.3       | 132.1     | 155.0   | 101.7   | 120.7     | 144.5   |
| SMALL BUSINESS ADMINISTRATION.....                      | .5          | -         | .1      | .5      | -         | .1      |
| SMITHSONIAN INSTITUTION.....                            | 29.7        | 32.6      | 34.0    | 29.8    | 32.2      | 34.0    |
| TENNESSEE VALLEY AUTHORITY.....                         | 26.5        | 35.6      | 51.3    | 26.5    | 35.6      | 51.3    |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....  | 2.2         | 2.6       | 3.7     | 2.2     | 2.6       | 3.4     |
| UNITED STATES INTERNATIONAL TRADE COMMISSION.....       | 2.6         | 2.6       | 2.7     | 2.6     | 2.6       | 2.7     |
| VETERANS ADMINISTRATION.....                            | 107.0       | 116.0     | 115.2   | 106.9   | 113.9     | 115.2   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-4. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY  
AND CHARACTER OF WORK: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                        | TOTAL      | RESEARCH  |           | DEVELOPMENT |
|---------------------------------------------------------------|------------|-----------|-----------|-------------|
|                                                               |            | BASIC     | APPLIED   |             |
| TOTAL, ALL AGENCIES.....                                      | 23,929,120 | 2,894,123 | 5,947,092 | 15,087,905  |
| DEPARTMENTS                                                   |            |           |           |             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                         | 546,963    | 204,450   | 319,570   | 22,943      |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....          | 30,490     | 3,770     | 25,897    | 823         |
| FOREST SERVICE.....                                           | 90,262     | 26,718    | 59,392    | 4,152       |
| SCIENCE AND EDUCATION ADMINISTRATION.....                     | 426,211    | 173,962   | 234,241   | 17,968      |
| COOPERATIVE RESEARCH.....                                     | 127,265    | 48,361    | 78,904    | -           |
| FEDERAL RESEARCH.....                                         | 298,946    | 125,601   | 155,377   | 17,968      |
| DEPARTMENT OF COMMERCE, TOTAL.....                            | 244,721    | 23,159    | 152,970   | 68,592      |
| BUREAU OF THE CENSUS.....                                     | 2,634      | 200       | 1,808     | 626         |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....                      | 15,000     | 1,000     | 1,500     | 12,500      |
| MARITIME ADMINISTRATION.....                                  | 14,800     | 1,200     | 2,500     | 11,100      |
| NATIONAL BUREAU OF STANDARDS.....                             | 53,223     | 6,918     | 38,036    | 8,269       |
| NATIONAL FIRE PREVENTION AND CONTROL ADMINISTRATION.....      | 6,576      | 2,684     | 1,792     | 2,100       |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....          | 145,692    | 10,857    | 104,919   | 29,916      |
| NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION..... | 2,900      | 100       | 1,900     | 900         |
| OFFICE OF MINORITY BUSINESS ENTERPRISE.....                   | 3,438      | 200       | 515       | 3,723       |
| PATENT AND TRADEMARK OFFICE.....                              | 458        | -         | -         | 458         |
| DEPARTMENT OF DEFENSE, TOTAL.....                             | 10,963,351 | 294,826   | 1,746,571 | 8,921,954   |
| DEPARTMENT OF THE ARMY.....                                   | 2,441,866  | 58,552    | 374,863   | 2,008,451   |
| DEPARTMENT OF THE NAVY.....                                   | 3,817,410  | 115,328   | 262,639   | 3,439,443   |
| DEPARTMENT OF THE AIR FORCE.....                              | 4,031,095  | 85,300    | 750,000   | 3,195,795   |
| DEFENSE AGENCIES.....                                         | 641,441    | 35,646    | 357,769   | 248,026     |
| DEPARTMENT-WIDE FUNDS.....                                    | 1,300      | -         | 1,300     | -           |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....                 | 30,239     | -         | -         | 30,239      |
| DEPARTMENT OF ENERGY.....                                     | 3,536,220  | 389,450   | 501,816   | 2,644,954   |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....      | 2,787,338  | 757,219   | 1,676,503 | 353,616     |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION.....     | 152,987    | 62,670    | 89,296    | 1,021       |
| CENTER FOR DISEASE CONTROL.....                               | 55,273     | -         | 55,273    | -           |
| FOOD AND DRUG ADMINISTRATION.....                             | 42,872     | -         | 42,872    | -           |
| HEALTH CARE FINANCING ADMINISTRATION.....                     | 29,998     | -         | 29,998    | -           |
| HEALTH RESOURCES ADMINISTRATION.....                          | 7,410      | -         | 7,410     | -           |
| HEALTH SERVICES ADMINISTRATION.....                           | 17,653     | 2,031     | 7,490     | 8,132       |
| HUMAN DEVELOPMENT SERVICES.....                               | 76,789     | 2,178     | 46,533    | 28,078      |
| NATIONAL INSTITUTE OF EDUCATION.....                          | 64,884     | 11,880    | 15,240    | 37,764      |
| NATIONAL INSTITUTES OF HEALTH.....                            | 2,243,900  | 670,500   | 1,317,600 | 255,800     |
| OFFICE OF EDUCATION.....                                      | 31,085     | -         | 11,892    | 19,193      |
| OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATION.....          | 1,037      | -         | 1,037     | -           |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....             | 32,233     | 4,006     | 24,599    | 3,628       |
| OFFICE OF THE SECRETARY.....                                  | 20,000     | 3,954     | 16,046    | -           |
| SOCIAL SECURITY ADMINISTRATION.....                           | 11,217     | -         | 11,217    | -           |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....              | 52,104     | -         | 32,720    | 19,384      |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                        | 296,253    | 128,909   | 108,604   | 58,740      |
| BUREAU OF LAND MANAGEMENT.....                                | 881        | -         | 819       | 62          |
| BUREAU OF MINES.....                                          | 101,914    | 4,000     | 48,322    | 49,592      |
| BUREAU OF RECLAMATION.....                                    | 9,914      | 120       | 9,162     | 632         |
| GEOLOGICAL SURVEY.....                                        | 128,928    | 105,648   | 23,280    | -           |
| HERITAGE CONSERVATION AND RECREATION SERVICE.....             | 20         | -         | 20        | -           |
| NATIONAL PARK SERVICE.....                                    | 7,798      | -         | 7,498     | 300         |
| OFFICE OF THE SECRETARY.....                                  | 4,536      | 3,176     | 1,360     | -           |
| OFFICE OF WATER RESEARCH AND TECHNOLOGY.....                  | 15,062     | 2,865     | 9,443     | 2,754       |
| UNITED STATES FISH AND WILDLIFE SERVICE.....                  | 27,200     | 13,100    | 8,700     | 5,400       |
| DEPARTMENT OF JUSTICE, TOTAL.....                             | 27,650     | 5,100     | 12,484    | 10,066      |
| BUREAU OF PRISONS.....                                        | 1,145      | -         | 136       | 1,009       |
| DRUG ENFORCEMENT ADMINISTRATION.....                          | 3,000      | -         | 900       | 2,100       |
| FEDERAL BUREAU OF INVESTIGATION.....                          | 1,400      | -         | -         | 1,400       |
| IMMIGRATION AND NATURALIZATION SERVICE.....                   | 296        | -         | 148       | 148         |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....                | 21,809     | 5,100     | 11,300    | 5,409       |
| DEPARTMENT OF LABOR, TOTAL.....                               | 29,565     | 703       | 18,024    | 10,838      |
| BUREAU OF LABOR STATISTICS.....                               | 1,372      | -         | 896       | 476         |
| EMPLOYMENT AND TRAINING ADMINISTRATION.....                   | 16,755     | 558       | 5,835     | 10,362      |
| EMPLOYMENT STANDARDS ADMINISTRATION.....                      | 4,446      | -         | 4,446     | -           |
| LABOR-MANAGEMENT SERVICES ADMINISTRATION.....                 | 3,306      | 145       | 3,161     | -           |
| OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.....            | 3,441      | -         | 3,441     | -           |
| OFFICE OF THE SECRETARY.....                                  | 245        | -         | 245       | -           |
| DEPARTMENT OF STATE, TOTAL.....                               | 61,406     | -         | 38,270    | 23,136      |
| DEPARTMENTAL FUNDS.....                                       | 2,280      | -         | 2,065     | 215         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                     | 59,126     | -         | 36,205    | 22,921      |

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TABLE C-4. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY  
AND CHARACTER OF WORK: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                                  | TOTAL     | RESEARCH |         | DEVELOPMENT |
|---------------------------------------------------------|-----------|----------|---------|-------------|
|                                                         |           | BASIC    | APPLIED |             |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                | 354,604   | -        | 51,760  | 302,844     |
| FEDERAL AVIATION ADMINISTRATION.....                    | 103,400   | -        | 4,700   | 98,700      |
| FEDERAL HIGHWAY ADMINISTRATION.....                     | 55,500    | -        | 5,300   | 50,200      |
| FEDERAL RAILROAD ADMINISTRATION.....                    | 41,900    | -        | 6,600   | 35,300      |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....     | 47,000    | -        | 27,500  | 19,500      |
| OFFICE OF THE SECRETARY.....                            | 28,004    | -        | 4,160   | 23,844      |
| UNITED STATES COAST GUARD.....                          | 18,900    | -        | 2,500   | 16,400      |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....           | 59,900    | -        | 1,000   | 58,900      |
| DEPARTMENT OF THE TREASURY, TOTAL.....                  | 4,805     | -        | 2,140   | 2,665       |
| BUREAU OF ALCOHOL, TOBACCO AND FIREARMS.....            | 1,105     | -        | 440     | 665         |
| BUREAU OF ENGRAVING AND PRINTING.....                   | 2,500     | -        | 1,700   | 800         |
| CUSTOMS SERVICE.....                                    | 1,200     | -        | -       | 1,200       |
| OTHER AGENCIES                                          |           |          |         |             |
| ACTION.....                                             | 470       | 51       | 49      | 370         |
| ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS..... | 1,526     | -        | 1,526   | -           |
| APPALACHIAN REGIONAL COMMISSION.....                    | 662       | -        | 562     | 100         |
| CIVIL AERONAUTICS BOARD.....                            | 535       | -        | 535     | -           |
| CIVIL SERVICE COMMISSION.....                           | 3,905     | 394      | 691     | 2,820       |
| COMMUNITY SERVICES ADMINISTRATION.....                  | 23,987    | -        | 1,000   | 22,987      |
| CONSUMER PRODUCT SAFETY COMMISSION.....                 | 6,728     | -        | 3,710   | 3,018       |
| ENVIRONMENTAL PROTECTION AGENCY.....                    | 295,450   | 8,296    | 196,956 | 90,198      |
| FEDERAL COMMUNICATIONS COMMISSION.....                  | 2,043     | -        | 2,043   | -           |
| FEDERAL HOME LOAN BANK BOARD.....                       | 1,665     | -        | 1,665   | -           |
| FEDERAL TRADE COMMISSION.....                           | 1,111     | 361      | 750     | -           |
| GENERAL SERVICES ADMINISTRATION.....                    | 915       | 99       | 287     | 529         |
| INTERNATIONAL COMMUNICATION AGENCY.....                 | 104       | -        | 71      | 33          |
| INTERSTATE COMMERCE COMMISSION.....                     | 64        | -        | 64      | -           |
| LIBRARY OF CONGRESS.....                                | 3,800     | 140      | 260     | 3,400       |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....      | 3,703,385 | 413,774  | 792,302 | 2,497,309   |
| NATIONAL SCIENCE FOUNDATION.....                        | 697,019   | 624,900  | 63,400  | 8,719       |
| NUCLEAR REGULATORY COMMISSION.....                      | 112,291   | -        | 112,291 | -           |
| SMALL BUSINESS ADMINISTRATION.....                      | 466       | -        | 466     | -           |
| SMITHSONIAN INSTITUTION.....                            | 29,651    | 29,651   | -       | -           |
| TENNESSEE VALLEY AUTHORITY.....                         | 26,475    | 3,546    | 19,340  | 3,589       |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....  | 2,238     | -        | 1,796   | 442         |
| UNITED STATES INTERNATIONAL TRADE COMMISSION.....       | 2,649     | -        | 2,649   | -           |
| VETERANS ADMINISTRATION.....                            | 107,001   | 9,095    | 83,247  | 14,659      |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-5. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY  
AND CHARACTER OF WORK: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                        | TOTAL      | RESEARCH  |           | DEVELOPMENT |
|---------------------------------------------------------------|------------|-----------|-----------|-------------|
|                                                               |            | BASIC     | APPLIED   |             |
| TOTAL, ALL AGENCIES.....                                      | 26,419,470 | 3,292,330 | 6,565,201 | 16,561,939  |
| DEPARTMENTS                                                   |            |           |           |             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                         | 632,457    | 251,043   | 355,493   | 25,921      |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....          | 34,761     | 4,233     | 29,666    | 862         |
| FOREST SERVICE.....                                           | 106,490    | 31,095    | 70,390    | 5,005       |
| SCIENCE AND EDUCATION ADMINISTRATION.....                     | 491,206    | 215,715   | 255,437   | 20,054      |
| COOPERATIVE RESEARCH.....                                     | 157,674    | 69,216    | 88,458    | -           |
| FEDERAL RESEARCH.....                                         | 333,532    | 146,499   | 166,979   | 20,054      |
| DEPARTMENT OF COMMERCE, TOTAL.....                            | 287,745    | 26,721    | 166,529   | 94,495      |
| BUREAU OF THE CENSUS.....                                     | 3,306      | 278       | 1,904     | 1,124       |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....                      | 37,100     | 2,500     | 3,000     | 31,600      |
| MARITIME ADMINISTRATION.....                                  | 17,700     | 1,500     | 2,900     | 13,300      |
| NATIONAL BUREAU OF STANDARDS.....                             | 55,008     | 7,218     | 39,690    | 8,100       |
| NATIONAL FIRE PREVENTION AND CONTROL ADMINISTRATION.....      | 7,084      | 2,796     | 1,894     | 2,394       |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....          | 160,481    | 12,129    | 114,741   | 33,611      |
| NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION..... | 2,600      | 100       | 1,700     | 800         |
| OFFICE OF MINORITY BUSINESS ENTERPRISE.....                   | 4,000      | 200       | 700       | 3,100       |
| PATENT AND TRADEMARK OFFICE.....                              | 466        | -         | -         | 466         |
| DEPARTMENT OF DEFENSE, TOTAL.....                             | 11,824,746 | 329,791   | 1,813,568 | 9,681,387   |
| DEPARTMENT OF THE ARMY.....                                   | 2,602,145  | 61,724    | 377,720   | 2,162,701   |
| DEPARTMENT OF THE NAVY.....                                   | 4,056,550  | 130,563   | 272,193   | 3,653,794   |
| DEPARTMENT OF THE AIR FORCE.....                              | 4,399,196  | 95,700    | 770,000   | 3,533,496   |
| DEFENSE AGENCIES.....                                         | 732,955    | 41,804    | 386,755   | 304,396     |
| DEPARTMENTWIDE FUNDS.....                                     | 6,900      | -         | 6,900     | -           |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....                 | 27,000     | -         | -         | 27,000      |
| DEPARTMENT OF ENERGY.....                                     | 4,195,752  | 432,692   | 572,478   | 3,190,582   |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....      | 3,131,515  | 866,108   | 1,884,148 | 381,259     |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION.....     | 163,047    | 69,310    | 93,054    | 683         |
| CENTER FOR DISEASE CONTROL.....                               | 62,664     | -         | 62,664    | -           |
| FOOD AND DRUG ADMINISTRATION.....                             | 48,600     | -         | 48,600    | -           |
| HEALTH CARE FINANCING ADMINISTRATION.....                     | 35,065     | -         | 35,065    | -           |
| HEALTH RESOURCES ADMINISTRATION.....                          | 5,000      | -         | 5,000     | -           |
| HEALTH SERVICES ADMINISTRATION.....                           | 17,001     | 2,300     | 7,486     | 7,215       |
| HUMAN DEVELOPMENT SERVICES.....                               | 79,006     | 2,378     | 47,469    | 29,159      |
| NATIONAL INSTITUTE OF EDUCATION.....                          | 84,600     | 17,800    | 19,200    | 47,600      |
| NATIONAL INSTITUTES OF HEALTH.....                            | 2,520,600  | 763,100   | 1,482,800 | 274,700     |
| OFFICE OF EDUCATION.....                                      | 32,363     | -         | 14,255    | 18,108      |
| OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATION.....          | 1,042      | -         | 1,042     | -           |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....             | 39,475     | 5,870     | 29,811    | 3,794       |
| OFFICE OF THE SECRETARY.....                                  | 30,000     | 5,350     | 24,650    | -           |
| SOCIAL SECURITY ADMINISTRATION.....                           | 13,052     | -         | 13,052    | -           |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....              | 68,537     | -         | 38,100    | 30,437      |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                        | 372,311    | 158,457   | 137,488   | 76,366      |
| BUREAU OF LAND MANAGEMENT.....                                | 1,169      | -         | 1,078     | 91          |
| BUREAU OF MINES.....                                          | 121,294    | 5,300     | 54,765    | 61,229      |
| BUREAU OF RECLAMATION.....                                    | 11,569     | 152       | 10,771    | 846         |
| GEOLOGICAL SURVEY.....                                        | 162,565    | 131,992   | 30,573    | -           |
| NATIONAL PARK SERVICE.....                                    | 9,900      | -         | 9,500     | 400         |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT.....     | 7,800      | -         | 7,800     | -           |
| OFFICE OF THE SECRETARY.....                                  | 3,299      | 3,013     | 286       | -           |
| OFFICE OF WATER RESEARCH AND TECHNOLOGY.....                  | 25,615     | 4,100     | 13,415    | 8,100       |
| UNITED STATES FISH AND WILDLIFE SERVICE.....                  | 29,100     | 13,900    | 9,300     | 5,900       |
| DEPARTMENT OF JUSTICE, TOTAL.....                             | 67,526     | 14,000    | 33,750    | 19,776      |
| BUREAU OF PRISONS.....                                        | 3,387      | -         | 746       | 2,641       |
| DRUG ENFORCEMENT ADMINISTRATION.....                          | 5,800      | -         | 2,300     | 3,500       |
| FEDERAL BUREAU OF INVESTIGATION.....                          | 1,825      | -         | -         | 1,825       |
| IMMIGRATION AND NATURALIZATION SERVICE.....                   | 608        | -         | 304       | 304         |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....                | 53,906     | 14,000    | 28,400    | 11,506      |
| OFFICE OF THE ATTORNEY GENERAL.....                           | 2,000      | -         | 2,000     | -           |
| DEPARTMENT OF LABOR, TOTAL.....                               | 32,204     | 675       | 19,041    | 12,488      |
| BUREAU OF LABOR STATISTICS.....                               | 1,198      | -         | 742       | 456         |
| EMPLOYMENT AND TRAINING ADMINISTRATION.....                   | 17,654     | 560       | 5,062     | 12,032      |
| EMPLOYMENT STANDARDS ADMINISTRATION.....                      | 5,583      | -         | 5,583     | -           |
| LABOR-MANAGEMENT SERVICES ADMINISTRATION.....                 | 3,025      | 115       | 2,910     | -           |
| OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.....            | 4,499      | -         | 4,499     | -           |
| OFFICE OF THE SECRETARY.....                                  | 245        | -         | 245       | -           |
| DEPARTMENT OF STATE, TOTAL.....                               | 62,881     | -         | 35,835    | 27,046      |
| DEPARTMENTAL FUNDS.....                                       | 2,927      | -         | 2,427     | 500         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                     | 59,954     | -         | 33,408    | 26,546      |

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TABLE C-5. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY  
AND CHARACTER OF WORK: FISCAL YEAR 1978 (ESTIMATED)

- CONTINUED

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                  | TOTAL     | RESEARCH |         | DEVELOPMENT |
|---------------------------------------------------------|-----------|----------|---------|-------------|
|                                                         |           | BASIC    | APPLIED |             |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                | 407,466   | -        | 57,800  | 349,666     |
| FEDERAL AVIATION ADMINISTRATION.....                    | 121,000   | -        | 7,700   | 113,300     |
| FEDERAL HIGHWAY ADMINISTRATION.....                     | 55,700    | -        | 5,200   | 50,500      |
| FEDERAL RAILROAD ADMINISTRATION.....                    | 59,000    | -        | 8,300   | 50,700      |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....     | 48,100    | -        | 28,800  | 19,300      |
| OFFICE OF THE SECRETARY.....                            | 35,266    | -        | 5,500   | 29,766      |
| RESEARCH AND SPECIAL PROGRAM DIRECTORATE.....           | 900       | -        | -       | 900         |
| UNITED STATES COAST GUARD.....                          | 19,200    | -        | 1,200   | 18,000      |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....           | 68,300    | -        | 1,100   | 67,200      |
| DEPARTMENT OF THE TREASURY, TOTAL.....                  | 6,891     | -        | 2,292   | 4,599       |
| BUREAU OF ALCOHOL, TOBACCO AND FIREARMS.....            | 2,316     | -        | 192     | 1,824       |
| BUREAU OF ENGRAVING AND PRINTING.....                   | 2,700     | -        | 1,800   | 900         |
| CUSTOMS SERVICE.....                                    | 1,875     | -        | -       | 1,875       |
| OTHER AGENCIES                                          |           |          |         |             |
| ACTION.....                                             | 1,322     | 307      | 159     | 856         |
| ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS..... | 1,659     | -        | 1,659   | -           |
| APPALACHIAN REGIONAL COMMISSION.....                    | 800       | -        | 600     | 200         |
| CIVIL AERONAUTICS BOARD.....                            | 734       | -        | 734     | -           |
| CIVIL SERVICE COMMISSION.....                           | 4,344     | 409      | 718     | 3,217       |
| COMMUNITY SERVICES ADMINISTRATION.....                  | 21,500    | -        | 1,000   | 20,500      |
| CONSUMER PRODUCT SAFETY COMMISSION.....                 | 4,245     | -        | 1,763   | 2,482       |
| ENVIRONMENTAL PROTECTION AGENCY.....                    | 331,000   | 8,325    | 229,475 | 93,200      |
| FEDERAL COMMUNICATIONS COMMISSION.....                  | 2,959     | -        | 2,959   | -           |
| FEDERAL HOME LOAN BANK BOARD.....                       | 1,113     | -        | 1,113   | -           |
| FEDERAL TRADE COMMISSION.....                           | 1,335     | 454      | 881     | -           |
| GENERAL SERVICES ADMINISTRATION.....                    | 2,231     | 1,384    | 357     | 490         |
| INTERNATIONAL COMMUNICATION AGENCY.....                 | 179       | -        | 141     | 38          |
| INTERSTATE COMMERCE COMMISSION.....                     | 216       | -        | 216     | -           |
| LIBRARY OF CONGRESS.....                                | 4,300     | 130      | 270     | 3,900       |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....      | 3,876,490 | 468,060  | 890,449 | 2,517,981   |
| NATIONAL SCIENCE FOUNDATION.....                        | 753,600   | 688,000  | 60,327  | 5,273       |
| NUCLEAR REGULATORY COMMISSION.....                      | 132,139   | -        | 132,139 | -           |
| SMITHSONIAN INSTITUTION.....                            | 32,553    | 32,553   | -       | -           |
| TENNESSEE VALLEY AUTHORITY.....                         | 35,585    | 3,712    | 27,109  | 4,764       |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....  | 2,550     | -        | 2,145   | 405         |
| UNITED STATES INTERNATIONAL TRADE COMMISSION.....       | 2,622     | -        | 2,622   | -           |
| VETERANS ADMINISTRATION.....                            | 115,963   | 9,509    | 91,843  | 14,611      |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-6. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY  
AND CHARACTER OF WORK: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                        | TOTAL      | RESEARCH  |           | DEVELOPMENT |
|---------------------------------------------------------------|------------|-----------|-----------|-------------|
|                                                               |            | BASIC     | APPLIED   |             |
| TOTAL, ALL AGENCIES.....                                      | 27,972,177 | 3,636,729 | 6,845,938 | 17,489,510  |
| DEPARTMENTS                                                   |            |           |           |             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                         | 636,004    | 266,784   | 344,683   | 24,537      |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....          | 35,761     | 4,373     | 30,526    | 862         |
| FOREST SERVICE.....                                           | 102,852    | 30,033    | 67,985    | 4,834       |
| SCIENCE AND EDUCATION ADMINISTRATION.....                     | 497,391    | 232,378   | 246,172   | 18,841      |
| COOPERATIVE RESEARCH.....                                     | 157,599    | 78,488    | 79,111    | -           |
| FEDERAL RESEARCH.....                                         | 339,792    | 153,890   | 167,061   | 18,841      |
| DEPARTMENT OF COMMERCE, TOTAL.....                            | 315,108    | 30,458    | 189,624   | 95,026      |
| BUREAU OF THE CENSUS.....                                     | 3,810      | 397       | 2,283     | 1,130       |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....                      | 40,100     | 2,000     | 3,500     | 34,600      |
| MARITIME ADMINISTRATION.....                                  | 15,000     | 1,200     | 2,500     | 11,300      |
| NATIONAL BUREAU OF STANDARDS.....                             | 66,023     | 8,322     | 47,812    | 9,889       |
| NATIONAL FIRE PREVENTION AND CONTROL ADMINISTRATION.....      | 7,957      | 2,589     | 2,209     | 3,159       |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....          | 174,950    | 15,650    | 128,320   | 30,980      |
| NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION..... | 3,200      | 100       | 2,200     | 900         |
| OFFICE OF MINORITY BUSINESS ENTERPRISE.....                   | 3,600      | 200       | 800       | 2,600       |
| PATENT AND TRADEMARK OFFICE.....                              | 468        | -         | -         | 468         |
| DEPARTMENT OF DEFENSE, TOTAL.....                             | 12,837,653 | 371,163   | 1,948,344 | 10,518,146  |
| DEPARTMENT OF THE ARMY.....                                   | 2,833,138  | 65,870    | 410,442   | 2,356,826   |
| DEPARTMENT OF THE NAVY.....                                   | 4,501,900  | 151,893   | 293,561   | 4,056,446   |
| DEPARTMENT OF THE AIR FORCE.....                              | 4,615,600  | 103,400   | 780,000   | 3,730,200   |
| DEFENSE AGENCIES.....                                         | 854,815    | 48,000    | 459,141   | 347,674     |
| DEPARTMENT-WIDE FUNDS.....                                    | 5,200      | -         | 5,200     | -           |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....                 | 27,000     | -         | -         | 27,000      |
| DEPARTMENT OF ENERGY.....                                     | 4,174,977  | 468,217   | 606,146   | 3,100,614   |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....      | 3,271,088  | 982,102   | 1,903,743 | 385,243     |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION.....     | 203,248    | 85,130    | 116,281   | 1,837       |
| CENTER FOR DISEASE CONTROL.....                               | 63,075     | -         | 63,075    | -           |
| FOOD AND DRUG ADMINISTRATION.....                             | 49,147     | -         | 49,147    | -           |
| HEALTH CARE FINANCING ADMINISTRATION.....                     | 38,552     | -         | 38,552    | -           |
| HEALTH SERVICES ADMINISTRATION.....                           | 17,235     | 2,300     | 7,720     | 7,215       |
| HUMAN DEVELOPMENT SERVICES.....                               | 85,719     | 2,378     | 51,444    | 31,897      |
| NATIONAL INSTITUTE OF EDUCATION.....                          | 94,400     | 23,800    | 23,100    | 47,500      |
| NATIONAL INSTITUTES OF HEALTH.....                            | 2,606,300  | 856,000   | 1,474,800 | 275,500     |
| OFFICE OF EDUCATION.....                                      | 33,101     | -         | 16,727    | 16,374      |
| OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATION.....          | 1,042      | -         | 1,042     | -           |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....             | 37,185     | 5,944     | 26,321    | 4,920       |
| OFFICE OF THE SECRETARY.....                                  | 27,000     | 6,550     | 20,450    | -           |
| SOCIAL SECURITY ADMINISTRATION.....                           | 15,084     | -         | 15,084    | -           |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....              | 68,977     | -         | 36,268    | 32,709      |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                        | 359,433    | 167,846   | 129,965   | 61,622      |
| BUREAU OF LAND MANAGEMENT.....                                | 1,137      | -         | 1,035     | 102         |
| BUREAU OF MINES.....                                          | 102,957    | 6,600     | 50,665    | 45,692      |
| BUREAU OF RECLAMATION.....                                    | 7,190      | 176       | 6,156     | 858         |
| GEOLOGICAL SURVEY.....                                        | 173,487    | 139,391   | 34,096    | -           |
| NATIONAL PARK SERVICE.....                                    | 10,500     | -         | 10,000    | 500         |
| OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT.....     | 2,700      | -         | 2,700     | -           |
| OFFICE OF THE SECRETARY.....                                  | 2,479      | 2,479     | -         | -           |
| OFFICE OF WATER RESEARCH AND TECHNOLOGY.....                  | 27,683     | 4,200     | 15,313    | 8,170       |
| UNITED STATES FISH AND WILDLIFE SERVICE.....                  | 31,300     | 15,000    | 10,000    | 6,300       |
| DEPARTMENT OF JUSTICE, TOTAL.....                             | 42,091     | 9,100     | 22,031    | 10,960      |
| BUREAU OF PRISONS.....                                        | 2,976      | -         | 1,331     | 1,645       |
| DRUG ENFORCEMENT ADMINISTRATION.....                          | 2,300      | -         | 900       | 1,400       |
| FEDERAL BUREAU OF INVESTIGATION.....                          | 1,275      | -         | -         | 1,275       |
| IMMIGRATION AND NATURALIZATION SERVICE.....                   | 400        | -         | 100       | 300         |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....                | 33,140     | 9,100     | 17,700    | 6,340       |
| OFFICE OF THE ATTORNEY GENERAL.....                           | 2,000      | -         | 2,000     | -           |
| DEPARTMENT OF LABOR, TOTAL.....                               | 32,062     | 588       | 22,889    | 8,585       |
| BUREAU OF LABOR STATISTICS.....                               | 860        | -         | 860       | -           |
| EMPLOYMENT AND TRAINING ADMINISTRATION.....                   | 14,343     | 473       | 5,285     | 8,585       |
| EMPLOYMENT STANDARDS ADMINISTRATION.....                      | 5,593      | -         | 5,593     | -           |
| LABOR-MANAGEMENT SERVICES ADMINISTRATION.....                 | 3,050      | 115       | 2,935     | -           |
| OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.....            | 6,546      | -         | 6,546     | -           |
| OFFICE OF THE SECRETARY.....                                  | 1,670      | -         | 1,670     | -           |
| DEPARTMENT OF STATE, TOTAL.....                               | 84,432     | -         | 51,772    | 32,660      |
| DEPARTMENTAL FUNDS.....                                       | 2,754      | -         | 2,254     | 500         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                     | 81,678     | -         | 49,518    | 32,160      |

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TABLE C-6. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY  
AND CHARACTER OF WORK: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                                  | TOTAL     | RESEARCH |         | DEVELOPMENT |
|---------------------------------------------------------|-----------|----------|---------|-------------|
|                                                         |           | BASIC    | APPLIED |             |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                | 372,236   | -        | 60,160  | 312,076     |
| FEDERAL AVIATION ADMINISTRATION.....                    | 106,300   | -        | 7,400   | 98,900      |
| FEDERAL HIGHWAY ADMINISTRATION.....                     | 57,600    | -        | 5,700   | 51,900      |
| FEDERAL RAILROAD ADMINISTRATION.....                    | 39,700    | -        | 6,000   | 32,900      |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....     | 52,700    | -        | 31,000  | 21,700      |
| OFFICE OF THE SECRETARY.....                            | 15,936    | -        | 2,420   | 13,516      |
| RESEARCH AND SPECIAL PROGRAM DIRECTORATE.....           | 13,900    | -        | 2,040   | 11,860      |
| UNITED STATES COAST GUARD.....                          | 19,200    | -        | 3,600   | 15,600      |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....           | 66,900    | -        | 1,200   | 65,700      |
| DEPARTMENT OF THE TREASURY, TOTAL.....                  | 7,790     | -        | 2,650   | 5,140       |
| BUREAU OF ALCOHOL, TOBACCO AND FIREARMS.....            | 2,590     | -        | 550     | 2,040       |
| BUREAU OF ENGRAVING AND PRINTING.....                   | 3,200     | -        | 2,100   | 1,100       |
| CUSTOMS SERVICE.....                                    | 2,000     | -        | -       | 2,000       |
| OTHER AGENCIES                                          |           |          |         |             |
| ACTION.....                                             | 5,574     | -        | 3,882   | 1,692       |
| ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS..... | 1,664     | -        | 1,664   | -           |
| APPALACHIAN REGIONAL COMMISSION.....                    | 800       | -        | 600     | 200         |
| CIVIL AERONAUTICS BOARD.....                            | 836       | -        | 836     | -           |
| CIVIL SERVICE COMMISSION.....                           | 4,344     | 409      | 718     | 3,217       |
| COMMUNITY SERVICES ADMINISTRATION.....                  | 27,000    | -        | 1,000   | 26,000      |
| CONSUMER PRODUCT SAFETY COMMISSION.....                 | 5,000     | -        | 2,050   | 2,950       |
| ENVIRONMENTAL PROTECTION AGENCY.....                    | 330,000   | 16,860   | 219,240 | 93,900      |
| FEDERAL COMMUNICATIONS COMMISSION.....                  | 3,365     | -        | 3,365   | -           |
| FEDERAL HOME LOAN BANK BOARD.....                       | 1,316     | -        | 1,316   | -           |
| FEDERAL TRADE COMMISSION.....                           | 1,319     | 444      | 875     | -           |
| GENERAL SERVICES ADMINISTRATION.....                    | 1,112     | 17       | 384     | 711         |
| INTERNATIONAL COMMUNICATION AGENCY.....                 | 125       | -        | 100     | 25          |
| INTERSTATE COMMERCE COMMISSION.....                     | 65        | -        | 65      | -           |
| LIBRARY OF CONGRESS.....                                | 4,700     | 130      | 270     | 4,300       |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....      | 4,192,544 | 519,775  | 931,961 | 2,740,808   |
| NATIONAL SCIENCE FOUNDATION.....                        | 828,700   | 754,900  | 65,950  | 7,850       |
| NUCLEAR REGULATORY COMMISSION.....                      | 155,030   | -        | 155,030 | -           |
| SMALL BUSINESS ADMINISTRATION.....                      | 55        | -        | 55      | -           |
| SMITHSONIAN INSTITUTION.....                            | 33,969    | 33,969   | -       | -           |
| TENNESSEE VALLEY AUTHORITY.....                         | 51,293    | 4,178    | 41,837  | 5,278       |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....  | 3,681     | -        | 2,931   | 750         |
| UNITED STATES INTERNATIONAL TRADE COMMISSION.....       | 2,666     | -        | 2,666   | -           |
| VETERANS ADMINISTRATION.....                            | 115,168   | 9,789    | 90,868  | 14,511      |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-7. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1977  
(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                    | TOTAL    | INTRA-MURAL (1) | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                  |                           |                                    |                               |                                         |       | STATE AND LOCAL GOVTS | FOREIGN |
|-------------------------------------------|----------|-----------------|---------------------------------------------|----------------------------------|---------------------------|------------------------------------|-------------------------------|-----------------------------------------|-------|-----------------------|---------|
|                                           |          |                 | INDUSTRIAL FIRMS                            | FFRDCS ADMIN BY INDUSTRIAL FIRMS | UNIVERSITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTITUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS |       |                       |         |
| TOTAL, ALL AGENCIES.....                  | 23,929.1 | 6,141.6         | 11,125.3                                    | 1,112.7                          | 2,886.0                   | 1,326.8                            | 782.0                         | 263.9                                   | 202.6 | 88.2                  |         |
| DEPARTMENTS                               |          |                 |                                             |                                  |                           |                                    |                               |                                         |       |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....     | 547.0    | 392.9           | 6.6                                         | -                                | 140.1                     | -                                  | .2                            | .2                                      | 1.0   | 6.0                   |         |
| ECON, STAT & COOPERATIVES SERVICE.....    | 30.5     | 29.7            | -                                           | -                                | .8                        | -                                  | -                             | -                                       | -     | -                     |         |
| FOREST SERVICE.....                       | 90.3     | 82.4            | .6                                          | -                                | 6.9                       | -                                  | *                             | .2                                      | .2    | -                     |         |
| SCIENCE AND EDUCATION ADMINISTRATION..... | 426.2    | 280.9           | 6.0                                         | -                                | 132.3                     | -                                  | .2                            | -                                       | .8    | 6.0                   |         |
| COOPERATIVE RESEARCH.....                 | 127.3    | 4.0             | -                                           | -                                | 122.7                     | -                                  | -                             | -                                       | .5    | -                     |         |
| FEDERAL RESEARCH.....                     | 298.9    | 276.8           | 6.0                                         | -                                | 9.6                       | -                                  | .2                            | -                                       | .3    | 6.0                   |         |
| DEPARTMENT OF COMMERCE, TOTAL.....        | 244.7    | 170.9           | 24.9                                        | -                                | 26.7                      | 1.2                                | 8.2                           | .2                                      | 12.0  | .5                    |         |
| BUREAU OF THE CENSUS.....                 | 2.6      | 2.5             | -                                           | -                                | .2                        | -                                  | -                             | -                                       | -     | -                     |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....  | 15.0     | .5              | 1.0                                         | -                                | 5.0                       | -                                  | 3.4                           | -                                       | 5.0   | -                     |         |
| MARITIME ADMINISTRATION.....              | 14.8     | 2.0             | 11.4                                        | -                                | .2                        | -                                  | .8                            | .2                                      | .1    | -                     |         |
| NATIONAL BUREAU OF STANDARDS.....         | 53.2     | 51.8            | .3                                          | -                                | .9                        | -                                  | .2                            | -                                       | -     | .1                    |         |
| NATIONAL FIRE PREV & CONTROL ADMIN.....   | 6.6      | 3.4             | .2                                          | -                                | 1.8                       | .3                                 | .4                            | -                                       | .3    | -                     |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....     | 145.7    | 107.0           | 11.6                                        | -                                | 18.6                      | .9                                 | .9                            | -                                       | 6.3   | .4                    |         |
| NAT'L TELECOMMUN & INFO ADMIN.....        | 2.9      | 2.9             | -                                           | -                                | -                         | -                                  | -                             | -                                       | -     | -                     |         |
| OFFICE OF MINORITY BUSINESS ENTERP.....   | 3.4      | .4              | .3                                          | -                                | -                         | -                                  | 2.5                           | -                                       | .3    | -                     |         |
| PATENT & TRADEMARK OFFICE.....            | .5       | .5              | -                                           | -                                | -                         | -                                  | -                             | -                                       | -     | -                     |         |
| DEPARTMENT OF DEFENSE, TOTAL.....         | 10,963.4 | 3,106.5         | 6,988.0                                     | 109.4                            | 262.8                     | 215.5                              | 103.1                         | 162.8                                   | .1    | 15.1                  |         |
| DEPARTMENT OF THE ARMY.....               | 2,441.9  | 918.4           | 1,433.1                                     | .2                               | 48.6                      | 14.2                               | 21.2                          | 4.1                                     | *     | 2.0                   |         |
| DEPARTMENT OF THE NAVY.....               | 3,817.4  | 1,075.9         | 2,351.2                                     | 108.8                            | 66.5                      | 151.0                              | 51.3                          | 5.0                                     | -     | 7.7                   |         |
| DEPARTMENT OF THE AIR FORCE.....          | 4,031.1  | 891.8           | 2,859.7                                     | -                                | 101.8                     | 29.5                               | 9.6                           | 133.4                                   | -     | 5.2                   |         |
| DEFENSE AGENCIES.....                     | 641.4    | 193.7           | 341.6                                       | .4                               | 45.7                      | 20.7                               | 20.8                          | 18.4                                    | -     | .2                    |         |
| DEPARTMENT-WIDE FUNDS.....                | 1.3      | .1              | .6                                          | -                                | .1                        | -                                  | .3                            | .1                                      | .1    | -                     |         |
| DIRECTOR OF TEST & EVALUATION, DEF.....   | 30.2     | 26.5            | 1.8                                         | -                                | -                         | -                                  | -                             | 1.9                                     | -     | -                     |         |
| DEPARTMENT OF ENERGY.....                 | 3,536.2  | 137.3           | 1,205.6                                     | 920.4                            | 188.2                     | 941.1                              | 40.9                          | 76.8                                    | 15.2  | 10.8                  |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL    | 2,787.3  | 554.7           | 143.3                                       | 23.3                             | 1,492.6                   | 6.3                                | 443.2                         | 2.7                                     | 84.7  | 36.6                  |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....  | 153.0    | 28.5            | 4.1                                         | -                                | 87.7                      | -                                  | 28.3                          | -                                       | 4.7   | 1.6                   |         |
| CENTER FOR DISEASE CONTROL.....           | 55.3     | 39.0            | 4.4                                         | -                                | 5.4                       | -                                  | 4.9                           | -                                       | .1    | 1.5                   |         |
| FOOD AND DRUG ADMINISTRATION.....         | 42.9     | 25.3            | 5.4                                         | -                                | 8.4                       | -                                  | 2.2                           | -                                       | .5    | 1.0                   |         |
| HEALTH CARE FINANCING ADMINISTRATION..... | 30.0     | 8.0             | 11.7                                        | -                                | 1.7                       | -                                  | 1.5                           | -                                       | 7.1   | -                     |         |
| HEALTH RESOURCES ADMINISTRATION.....      | 7.4      | .3              | -                                           | -                                | 7.1                       | -                                  | -                             | -                                       | -     | -                     |         |
| HEALTH SERVICES ADMINISTRATION.....       | 17.7     | 4.7             | 2.0                                         | -                                | 6.5                       | -                                  | 3.1                           | -                                       | .5    | .9                    |         |
| HUMAN DEVELOPMENT SERVICES.....           | 76.8     | 4.3             | 5.0                                         | -                                | 32.8                      | -                                  | 21.9                          | -                                       | 8.8   | 4.1                   |         |
| NATIONAL INSTITUTE OF EDUCATION.....      | 64.9     | 12.9            | 4.9                                         | -                                | 16.7                      | -                                  | 24.6                          | -                                       | 5.7   | .2                    |         |
| NATIONAL INSTITUTES OF HEALTH.....        | 2,243.9  | 412.1           | 100.4                                       | 23.3                             | 1,299.1                   | 6.3                                | 338.7                         | 2.7                                     | 35.4  | 25.9                  |         |
| OFFICE OF EDUCATION.....                  | 31.1     | 1.1             | 1.9                                         | -                                | 12.0                      | -                                  | 5.3                           | -                                       | 10.6  | .1                    |         |
| OFFICE OF ASS'T SECY FOR EDUCATION.....   | 1.0      | .1              | -                                           | -                                | -                         | -                                  | 1.0                           | -                                       | -     | -                     |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....      | 32.2     | 9.1             | .2                                          | -                                | 12.0                      | -                                  | 8.6                           | -                                       | .7    | 1.5                   |         |
| OFFICE OF THE SECRETARY.....              | 20.0     | 1.2             | 2.3                                         | -                                | 2.6                       | -                                  | 4.5                           | -                                       | 9.3   | -                     |         |
| SOCIAL SECURITY ADMINISTRATION.....       | 11.2     | 8.0             | 1.0                                         | -                                | .6                        | -                                  | .5                            | -                                       | 1.1   | -                     |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....  | 52.1     | 20.5            | 10.9                                        | -                                | 3.5                       | -                                  | 15.1                          | -                                       | 2.1   | -                     |         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....    | 296.3    | 228.4           | 37.8                                        | -                                | 26.2                      | -                                  | .1                            | .2                                      | 2.4   | 1.1                   |         |
| BUREAU OF LAND MANAGEMENT.....            | .9       | .6              | -                                           | -                                | .3                        | -                                  | -                             | -                                       | -     | -                     |         |
| BUREAU OF MINES.....                      | 101.9    | 65.2            | 30.1                                        | -                                | 5.7                       | -                                  | -                             | .2                                      | .7    | .1                    |         |
| BUREAU OF RECLAMATION.....                | 9.9      | 5.5             | .9                                          | -                                | 2.3                       | -                                  | -                             | -                                       | 1.2   | -                     |         |
| GEOLOGICAL SURVEY.....                    | 128.9    | 124.0           | .8                                          | -                                | 4.1                       | -                                  | -                             | -                                       | *     | -                     |         |
| HERITAGE CONSERVATION & REC SERVICE.....  | *        | *               | -                                           | -                                | -                         | -                                  | -                             | -                                       | -     | -                     |         |
| NATIONAL PARK SERVICE.....                | 7.8      | 4.7             | .3                                          | -                                | 2.7                       | -                                  | .1                            | -                                       | *     | -                     |         |
| OFFICE OF THE SECRETARY.....              | 4.5      | 1.5             | 1.6                                         | -                                | .4                        | -                                  | -                             | -                                       | -     | 1.1                   |         |
| OFFICE OF WATER RES AND TECHNOLOGY.....   | 15.1     | 1.1             | 3.8                                         | -                                | 9.8                       | -                                  | -                             | -                                       | .3    | -                     |         |
| US FISH AND WILDLIFE SERVICE.....         | 27.2     | 25.9            | .3                                          | -                                | .8                        | -                                  | -                             | -                                       | .3    | -                     |         |
| DEPARTMENT OF JUSTICE, TOTAL.....         | 27.7     | 4.2             | 5.2                                         | -                                | 5.7                       | -                                  | 9.6                           | 1.8                                     | 1.2   | -                     |         |
| BUREAU OF PRISONS.....                    | 1.1      | .6              | *                                           | -                                | .2                        | -                                  | .3                            | -                                       | *     | -                     |         |
| DRUG ENFORCEMENT ADMINISTRATION.....      | 3.0      | .9              | 1.4                                         | -                                | -                         | -                                  | -                             | .8                                      | -     | -                     |         |
| FEDERAL BUREAU OF INVESTIGATION.....      | 1.4      | .2              | 1.2                                         | -                                | -                         | -                                  | -                             | -                                       | -     | -                     |         |
| IMMIGRATION & NATURALIZATION SERVICE..... | .3       | *               | .3                                          | -                                | -                         | -                                  | -                             | -                                       | -     | -                     |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....     | 21.8     | 2.4             | 2.4                                         | -                                | 5.5                       | -                                  | 9.3                           | 1.0                                     | 1.2   | -                     |         |
| DEPARTMENT OF LABOR, TOTAL.....           | 29.6     | 9.5             | 7.7                                         | -                                | 7.2                       | *                                  | 4.8                           | -                                       | .4    | -                     |         |
| BUREAU OF LABOR STATISTICS.....           | 1.4      | 1.4             | -                                           | -                                | -                         | -                                  | -                             | -                                       | -     | -                     |         |
| EMPLOYMENT AND TRAINING ADMIN.....        | 16.8     | 2.5             | 3.6                                         | -                                | 5.7                       | -                                  | 4.6                           | -                                       | .4    | -                     |         |
| EMPLOYMENT STANDARDS ADMINISTRATION.....  | 4.4      | 4.4             | -                                           | -                                | .1                        | -                                  | -                             | -                                       | -     | -                     |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....      | 3.3      | 1.0             | .8                                          | -                                | 1.3                       | -                                  | .2                            | -                                       | -     | -                     |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN.....   | 3.4      | .1              | 3.2                                         | -                                | .1                        | -                                  | -                             | -                                       | -     | -                     |         |
| OFFICE OF THE SECRETARY.....              | .2       | .2              | *                                           | -                                | *                         | -                                  | -                             | -                                       | -     | -                     |         |
| DEPARTMENT OF STATE, TOTAL.....           | 61.4     | 7.6             | 2.4                                         | -                                | 27.7                      | -                                  | 18.0                          | -                                       | -     | 5.8                   |         |
| DEPARTMENTAL FUNDS.....                   | 2.3      | 1.1             | .6                                          | -                                | .3                        | -                                  | .2                            | -                                       | -     | .1                    |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT..... | 59.1     | 6.5             | 1.7                                         | -                                | 27.4                      | -                                  | 17.8                          | -                                       | -     | 5.7                   |         |

CONTINUED ON NEXT PAGE

TABLE C-7. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1977

(MILLIONS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL   | INTRA-MURAL (1) | EXTRAMURAL                    |                                   |                            |                                    |                                |                                          |                       |         |
|-----------------------------------------|---------|-----------------|-------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|-----------------------|---------|
|                                         |         |                 | UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                          |                       |         |
|                                         |         |                 | INDUSTRIAL FIRMS              | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS | STATE AND LOCAL GOVTS | FOREIGN |
| DEPT OF TRANSPORTATION, TOTAL.....      | 354.6   | 88.3            | 164.5                         | -                                 | 20.0                       | 0.7                                | 8.1                            | 10.6                                     | 42.2                  | 0.3     |
| FEDERAL AVIATION ADMINISTRATION.....    | 103.4   | 25.0            | 66.9                          | -                                 | 1.5                        | .2                                 | -                              | 9.8                                      | -                     | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 55.5    | 7.4             | 6.2                           | -                                 | 9.2                        | -                                  | 1.9                            | -                                        | 30.8                  | -       |
| FEDERAL RAILROAD ADMINISTRATION.....    | 41.9    | 15.0            | 23.7                          | -                                 | .4                         | -                                  | .4                             | .7                                       | 1.7                   | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 47.0    | 7.8             | 17.6                          | -                                 | 3.0                        | -                                  | 5.0                            | -                                        | 13.6                  | -       |
| OFFICE OF THE SECRETARY.....            | 28.0    | 12.3            | 10.3                          | -                                 | 2.3                        | .2                                 | .5                             | -                                        | 1.0                   | .3      |
| US COAST GUARD.....                     | 18.9    | 4.3             | 13.3                          | -                                 | .6                         | .3                                 | .4                             | -                                        | -                     | -       |
| URBAN MASS TRANSPORTATION ADMIN.....    | 59.9    | 16.5            | 26.3                          | -                                 | 2.0                        | -                                  | -                              | -                                        | 15.0                  | -       |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 4.8     | 3.4             | .4                            | -                                 | .2                         | -                                  | -                              | .9                                       | -                     | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 1.1     | .1              | .2                            | -                                 | -                          | -                                  | -                              | .8                                       | -                     | -       |
| BUREAU OF ENGRAVING AND PRINTING.....   | 2.5     | 2.5             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| CUSTOMS SERVICE.....                    | 1.2     | .8              | .3                            | -                                 | .2                         | -                                  | -                              | *                                        | -                     | -       |
| OTHER AGENCIES                          |         |                 |                               |                                   |                            |                                    |                                |                                          |                       |         |
| ACTION.....                             | .5      | .1              | -                             | -                                 | -                          | -                                  | .4                             | -                                        | *                     | -       |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1.5     | 1.5             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| APPALACHIAN REGIONAL COMMISSION.....    | .7      | .1              | .4                            | -                                 | -                          | -                                  | -                              | -                                        | .1                    | -       |
| CIVIL AERONAUTICS BOARD.....            | .5      | .5              | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| CIVIL SERVICE COMMISSION.....           | 3.9     | 2.4             | -                             | -                                 | -                          | -                                  | -                              | -                                        | 1.5                   | -       |
| COMMUNITY SERVICES ADMINISTRATION.....  | 24.0    | 1.5             | -                             | -                                 | -                          | -                                  | 22.5                           | -                                        | -                     | -       |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 6.7     | 3.6             | 1.5                           | -                                 | .1                         | -                                  | 1.5                            | -                                        | -                     | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 295.5   | 125.6           | 77.9                          | -                                 | 45.6                       | -                                  | 24.2                           | .7                                       | 15.3                  | 8.0     |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2.0     | 1.7             | .4                            | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| FEDERAL HOME LOAN BANK BOARD.....       | 1.7     | 1.5             | -                             | -                                 | .2                         | -                                  | -                              | -                                        | -                     | -       |
| FEDERAL TRADE COMMISSION.....           | 1.1     | 1.1             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| GENERAL SERVICES ADMINISTRATION.....    | .9      | .1              | .7                            | -                                 | -                          | -                                  | .1                             | -                                        | -                     | -       |
| INTERNATIONAL COMMUNICATION AGENCY..... | .1      | .1              | *                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| INTERSTATE COMMERCE COMMISSION.....     | .1      | .1              | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| LIBRARY OF CONGRESS.....                | 3.8     | 3.5             | .3                            | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 3,703.4 | 1,037.8         | 2,420.6                       | -                                 | 120.9                      | 91.9                               | 28.7                           | 1.5                                      | .4                    | 1.7     |
| NATIONAL SCIENCE FOUNDATION.....        | 697.0   | 79.5            | 15.3                          | 0.4                               | 510.9                      | 47.8                               | 35.6                           | .5                                       | 3.6                   | 3.5     |
| NUCLEAR REGULATORY COMMISSION.....      | 112.3   | 9.4             | 8.2                           | 59.1                              | 4.5                        | 22.2                               | 2.8                            | 5.1                                      | .2                    | .9      |
| SMALL BUSINESS ADMINISTRATION.....      | .5      | .3              | .1                            | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| SMITHSONIAN INSTITUTION.....            | 29.7    | 27.3            | -                             | -                                 | 1.8                        | -                                  | .6                             | -                                        | -                     | -       |
| TENNESSEE VALLEY AUTHORITY.....         | 26.5    | 13.0            | -                             | -                                 | .1                         | -                                  | 13.3                           | -                                        | -                     | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2.2     | .1              | 1.6                           | .1                                | *                          | *                                  | .4                             | .1                                       | -                     | -       |
| US INTERNATIONAL TRADE COMMISSION.....  | 2.6     | 2.6             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -       |
| VETERANS ADMINISTRATION.....            | 107.0   | 104.1           | 1.1                           | -                                 | 1.1                        | -                                  | .6                             | -                                        | .1                    | -       |

\* INDICATES AMOUNT LESS THAN \$50,000.

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-8. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)  
(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL    | INTRA-MURAL (1) | UNITED STATES AND TERRITORIES |                                    |                             |                                    |                                 |                                           |       | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|----------|-----------------|-------------------------------|------------------------------------|-----------------------------|------------------------------------|---------------------------------|-------------------------------------------|-------|-----------------------|---------|
|                                        |          |                 | INDUSTRIAL FIRMS              | FFRDCS ADMIN BY INDUS- TRIAL FIRMS | UNIVER- SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI- TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI- TUTIONS |       |                       |         |
| TOTAL, ALL AGENCIES.....               | 26,419.5 | 6,564.9         | 12,432.2                      | 1,179.6                            | 3,407.6                     | 1,282.7                            | 893.2                           | 305.8                                     | 229.4 | 124.0                 |         |
| DEPARTMENTS                            |          |                 |                               |                                    |                             |                                    |                                 |                                           |       |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 632.5    | 447.2           | .2                            | -                                  | 176.3                       | -                                  | -                               | -                                         | .8    | 7.9                   |         |
| ECON, STAT & COOPERATIVES SERVICE....  | 34.8     | 33.7            | -                             | -                                  | 1.0                         | -                                  | -                               | -                                         | -     | -                     |         |
| FOREST SERVICE.....                    | 106.5    | 97.4            | .2                            | -                                  | 8.7                         | -                                  | -                               | -                                         | .2    | -                     |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 491.2    | 316.1           | -                             | -                                  | 166.6                       | -                                  | -                               | -                                         | .6    | 7.9                   |         |
| COOPERATIVE RESEARCH.....              | 157.7    | 5.4             | -                             | -                                  | 151.7                       | -                                  | -                               | -                                         | .6    | -                     |         |
| FEDERAL RESEARCH.....                  | 333.5    | 310.7           | -                             | -                                  | 14.9                        | -                                  | -                               | -                                         | -     | 7.9                   |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 287.7    | 186.0           | 29.7                          | -                                  | 31.8                        | .5                                 | 21.9                            | .2                                        | 17.4  | .3                    |         |
| BUREAU OF THE CENSUS.....              | 3.3      | 3.1             | -                             | -                                  | .2                          | -                                  | -                               | -                                         | -     | -                     |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 37.1     | 1.6             | 1.3                           | -                                  | 7.0                         | -                                  | 16.7                            | -                                         | 10.5  | -                     |         |
| MARITIME ADMINISTRATION.....           | 17.7     | 1.6             | 15.3                          | -                                  | .3                          | -                                  | .4                              | .2                                        | -     | -                     |         |
| NATIONAL BUREAU OF STANDARDS.....      | 55.0     | 53.9            | -                             | -                                  | .9                          | -                                  | -                               | -                                         | -     | .3                    |         |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 7.1      | 3.4             | .4                            | -                                  | 2.0                         | .4                                 | .5                              | -                                         | .4    | -                     |         |
| NATIONAL OCEANIC & ATMOS ADMIN.....    | 160.5    | 118.4           | 12.6                          | -                                  | 21.5                        | .2                                 | 1.4                             | -                                         | 6.5   | .1                    |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 2.6      | 2.6             | -                             | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| OFFICE OF MINORITY BUSINESS ENTERP..   | 4.0      | 1.0             | .2                            | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| PATENT & TRADEMARK OFFICE.....         | .5       | .5              | -                             | -                                  | -                           | -                                  | 2.8                             | -                                         | -     | -                     |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 11,824.7 | 3,163.8         | 7,714.8                       | 102.6                              | 438.5                       | 83.1                               | 107.7                           | 181.5                                     | .5    | 32.2                  |         |
| DEPARTMENT OF THE ARMY.....            | 2,602.1  | 987.9           | 1,517.8                       | .1                                 | 50.1                        | 16.1                               | 19.6                            | 5.7                                       | .8    | 4.8                   |         |
| DEPARTMENT OF THE NAVY.....            | 4,056.6  | 1,080.7         | 2,553.7                       | 101.7                              | 232.3                       | 17.4                               | 53.8                            | 5.5                                       | -     | 11.4                  |         |
| DEPARTMENT OF THE AIR FORCE.....       | 4,399.2  | 859.8           | 3,217.9                       | -                                  | 112.3                       | 32.4                               | 12.6                            | 148.5                                     | -     | 15.7                  |         |
| DEFENSE AGENCIES.....                  | 733.0    | 211.5           | 420.7                         | .8                                 | 43.0                        | 17.1                               | 20.3                            | 19.3                                      | -     | .2                    |         |
| DEPARTMENTWIDE FUNDS.....              | 6.9      | .6              | 3.3                           | -                                  | .8                          | -                                  | 1.4                             | .3                                        | .5    | -                     |         |
| DIRECTOR OF TEST & EVALUATION, DEF..   | 27.0     | 23.5            | 1.4                           | -                                  | -                           | -                                  | -                               | 2.2                                       | -     | -                     |         |
| DEPARTMENT OF ENERGY.....              | 4,195.8  | 207.9           | 1,594.7                       | 972.6                              | 222.1                       | 1,030.8                            | 53.9                            | 94.1                                      | 12.4  | 7.3                   |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 3,131.5  | 605.6           | 157.8                         | 26.2                               | 1,701.4                     | 7.3                                | 489.8                           | 3.3                                       | 96.1  | 44.0                  |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 163.0    | 33.5            | 3.5                           | -                                  | 92.9                        | -                                  | 26.1                            | -                                         | 5.0   | 2.1                   |         |
| CENTER FOR DISEASE CONTROL.....        | 62.7     | 40.1            | 5.0                           | -                                  | 7.0                         | -                                  | 5.5                             | -                                         | .2    | 4.9                   |         |
| FOOD AND DRUG ADMINISTRATION.....      | 48.6     | 30.1            | 5.9                           | -                                  | 8.7                         | -                                  | 2.6                             | -                                         | -     | 1.4                   |         |
| HEALTH CARE FINANCING ADMINISTRATION.. | 35.1     | 9.4             | 12.6                          | -                                  | 2.2                         | -                                  | 1.3                             | -                                         | 9.6   | -                     |         |
| HEALTH RESOURCES ADMINISTRATION.....   | 5.0      | .2              | -                             | -                                  | 4.8                         | -                                  | -                               | -                                         | -     | -                     |         |
| HEALTH SERVICES ADMINISTRATION.....    | 17.0     | 5.3             | 2.0                           | -                                  | 5.3                         | -                                  | 3.4                             | -                                         | .5    | .6                    |         |
| HUMAN DEVELOPMENT SERVICES.....        | 79.0     | 4.6             | 5.3                           | -                                  | 75.3                        | -                                  | 23.7                            | -                                         | 9.3   | .8                    |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 84.6     | 14.6            | 6.2                           | -                                  | 23.3                        | -                                  | 32.8                            | -                                         | 7.5   | .2                    |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,520.6  | 447.3           | 107.4                         | 26.2                               | 1,487.9                     | 7.0                                | 373.0                           | 2.9                                       | 38.9  | 30.0                  |         |
| OFFICE OF EDUCATION.....               | 32.4     | 1.4             | 4.9                           | -                                  | 12.6                        | .3                                 | 4.9                             | .4                                        | 7.7   | .1                    |         |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 1.0      | .1              | -                             | -                                  | -                           | -                                  | 1.0                             | -                                         | -     | -                     |         |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 39.5     | 8.7             | .3                            | -                                  | 17.1                        | -                                  | 8.4                             | -                                         | 1.0   | 4.0                   |         |
| OFFICE OF THE SECRETARY.....           | 30.0     | 1.9             | 3.6                           | -                                  | 3.5                         | -                                  | 6.8                             | -                                         | 14.3  | -                     |         |
| SOCIAL SECURITY ADMINISTRATION.....    | 13.1     | 8.6             | 1.0                           | -                                  | .8                          | -                                  | .5                              | -                                         | 2.2   | -                     |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 68.5     | 23.2            | 18.3                          | -                                  | 3.9                         | -                                  | 19.8                            | -                                         | 3.3   | -                     |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 372.3    | 275.8           | 53.5                          | -                                  | 39.4                        | -                                  | .1                              | .2                                        | 2.3   | 1.0                   |         |
| BUREAU OF LAND MANAGEMENT.....         | 1.2      | .6              | -                             | -                                  | .6                          | -                                  | -                               | -                                         | -     | -                     |         |
| BUREAU OF MINES.....                   | 121.3    | 79.5            | 35.0                          | -                                  | 6.0                         | -                                  | -                               | .2                                        | .6    | -                     |         |
| BUREAU OF RECLAMATION.....             | 11.6     | 6.7             | 1.4                           | -                                  | 2.2                         | -                                  | -                               | -                                         | 1.3   | -                     |         |
| GEOLOGICAL SURVEY.....                 | 162.6    | 149.4           | 4.0                           | -                                  | 9.2                         | -                                  | -                               | -                                         | -     | -                     |         |
| NATIONAL PARK SERVICE.....             | 9.9      | 6.4             | .3                            | -                                  | 3.1                         | -                                  | .1                              | -                                         | .8    | -                     |         |
| OFF OF SURF MINING RECLAM & ENFORCE..  | 7.8      | 1.7             | -                             | -                                  | 6.1                         | -                                  | -                               | -                                         | -     | -                     |         |
| OFFICE OF THE SECRETARY.....           | 3.3      | 1.4             | .5                            | -                                  | .4                          | -                                  | -                               | -                                         | -     | 1.0                   |         |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 25.6     | 2.6             | 11.9                          | -                                  | 11.0                        | -                                  | -                               | -                                         | .1    | -                     |         |
| US FISH AND WILDLIFE SERVICE.....      | 29.1     | 27.6            | .3                            | -                                  | 1.0                         | -                                  | -                               | -                                         | .3    | -                     |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 67.5     | 6.1             | 9.3                           | -                                  | 9.9                         | -                                  | 36.9                            | 1.5                                       | 3.8   | -                     |         |
| BUREAU OF PRISONS.....                 | 3.4      | .8              | .8                            | -                                  | .7                          | -                                  | .9                              | -                                         | .9    | -                     |         |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 5.8      | 2.0             | 2.8                           | -                                  | -                           | -                                  | -                               | 1.0                                       | -     | -                     |         |
| FEDERAL BUREAU OF INVESTIGATION.....   | 1.8      | .3              | 1.6                           | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| IMMIGRATION & NATURALIZATION SERVICE   | .6       | .2              | .4                            | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 53.9     | 2.7             | 4.1                           | -                                  | 8.5                         | -                                  | 35.3                            | .5                                        | 2.9   | -                     |         |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2.0      | .1              | .5                            | -                                  | .7                          | -                                  | .7                              | -                                         | -     | -                     |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 32.2     | 10.6            | 9.4                           | -                                  | 5.2                         | -                                  | 5.3                             | -                                         | 1.6   | -                     |         |
| BUREAU OF LABOR STATISTICS.....        | 1.2      | 1.2             | -                             | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 17.7     | 2.3             | 4.0                           | -                                  | 4.7                         | -                                  | 5.0                             | -                                         | 1.6   | -                     |         |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 5.6      | 5.6             | -                             | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 3.0      | 1.2             | 1.1                           | -                                  | .5                          | -                                  | .3                              | -                                         | -     | -                     |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | 4.5      | .2              | 4.3                           | -                                  | -                           | -                                  | -                               | -                                         | -     | -                     |         |
| OFFICE OF THE SECRETARY.....           | .2       | .1              | .8                            | -                                  | .8                          | -                                  | .1                              | -                                         | -     | -                     |         |
| DEPARTMENT OF STATE, TOTAL.....        | 62.9     | 5.4             | 4.0                           | -                                  | 23.5                        | -                                  | 12.1                            | -                                         | -     | 17.9                  |         |
| DEPARTMENTAL FUNDS.....                | 2.9      | 1.3             | .9                            | -                                  | .3                          | -                                  | .2                              | -                                         | -     | .1                    |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 60.0     | 4.1             | 3.0                           | -                                  | 23.2                        | -                                  | 11.9                            | -                                         | -     | 17.8                  |         |

TABLE C-8. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1970 (ESTIMATED)

(MILLIONS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL   | INTRA-<br>MURAL (1) | UNITED STATES AND TERRITORIES |                          |                                      |                       |                                              |                                                           |                   | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|-----------------------------------------|---------|---------------------|-------------------------------|--------------------------|--------------------------------------|-----------------------|----------------------------------------------|-----------------------------------------------------------|-------------------|--------------------------------|---------|
|                                         |         |                     | INDUSTRIAL<br>FIRMS           | FFRDCS<br>ADMIN BY       | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY    | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN<br>BY NON-<br>PROFIT<br>INSTI-<br>TUTIONS |                   |                                |         |
|                                         |         |                     |                               | INDUS-<br>TRIAL<br>FIRMS |                                      | UNIVS AND<br>COLLEGES | UNIVS AND<br>COLLEGES                        | INSTI-<br>TUTIONS                                         | INSTI-<br>TUTIONS |                                |         |
| DEPT OF TRANSPORTATION, TOTAL.....      | 407.5   | 102.4               | 195.4                         | -                        | 20.4                                 | 0.6                   | 8.6                                          | 12.4                                                      | 67.8              | -                              | -       |
| FEDERAL AVIATION ADMINISTRATION.....    | 121.0   | 29.3                | 79.2                          | -                        | .9                                   | .2                    | -                                            | 11.4                                                      | -                 | -                              | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 55.7    | 7.4                 | 6.2                           | -                        | 9.1                                  | -                     | 1.8                                          | -                                                         | 31.1              | -                              | -       |
| FEDERAL RAILROAD ADMINISTRATION.....    | 59.0    | 20.6                | 33.9                          | -                        | .5                                   | -                     | .5                                           | 1.0                                                       | 2.5               | -                              | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 48.1    | 8.0                 | 18.3                          | -                        | 3.0                                  | -                     | 5.1                                          | -                                                         | 13.7              | -                              | -       |
| OFFICE OF THE SECRETARY.....            | 35.3    | 15.1                | 13.9                          | -                        | 4.0                                  | .3                    | .7                                           | -                                                         | 1.3               | -                              | -       |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE  | .9      | .2                  | .7                            | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| US COAST GUARD.....                     | 19.2    | 4.3                 | 13.6                          | -                        | .9                                   | -                     | .4                                           | -                                                         | -                 | -                              | -       |
| URBAN MASS TRANSPORTATION ADMIN.....    | 68.3    | 17.5                | 29.7                          | -                        | 2.0                                  | -                     | -                                            | -                                                         | 19.1              | -                              | -       |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 6.9     | 3.0                 | 1.5                           | -                        | .1                                   | -                     | -                                            | 2.3                                                       | -                 | -                              | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 2.3     | .1                  | -                             | -                        | -                                    | -                     | -                                            | 2.2                                                       | -                 | -                              | -       |
| BUREAU OF ENGRAVING AND PRINTING.....   | 2.7     | 1.7                 | 1.0                           | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| CUSTOMS SERVICE.....                    | 1.9     | 1.2                 | .5                            | -                        | .1                                   | -                     | -                                            | .1                                                        | -                 | -                              | -       |
| OTHER AGENCIES                          |         |                     |                               |                          |                                      |                       |                                              |                                                           |                   |                                |         |
| ACTION.....                             | 1.3     | .1                  | -                             | -                        | -                                    | -                     | 1.1                                          | -                                                         | .2                | -                              | -       |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1.7     | 1.7                 | -                             | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| APPALACHIAN REGIONAL COMMISSION.....    | .8      | .1                  | .6                            | -                        | -                                    | -                     | -                                            | -                                                         | .1                | -                              | -       |
| CIVIL AERONAUTICS BOARD.....            | .7      | .7                  | -                             | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| CIVIL SERVICE COMMISSION.....           | 4.3     | 2.3                 | -                             | -                        | -                                    | -                     | -                                            | -                                                         | 2.0               | -                              | -       |
| COMMUNITY SERVICES ADMINISTRATION.....  | 21.5    | 1.5                 | -                             | -                        | -                                    | -                     | 20.0                                         | -                                                         | -                 | -                              | -       |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 4.2     | 2.7                 | 1.3                           | -                        | -                                    | -                     | .3                                           | -                                                         | -                 | -                              | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 331.0   | 141.4               | 92.5                          | -                        | 45.4                                 | -                     | 27.9                                         | .8                                                        | 16.0              | 7.0                            | -       |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 3.0     | 2.2                 | .7                            | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| FEDERAL HOME LOAN BANK BOARD.....       | 1.1     | 1.0                 | -                             | -                        | .1                                   | -                     | -                                            | -                                                         | -                 | -                              | -       |
| FEDERAL TRADE COMMISSION.....           | 1.3     | 1.3                 | -                             | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| GENERAL SERVICES ADMINISTRATION.....    | 2.2     | 1.4                 | .8                            | -                        | -                                    | -                     | .8                                           | -                                                         | -                 | -                              | -       |
| INTERNATIONAL COMMUNICATION AGENCY..... | .2      | .1                  | *                             | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| INTERSTATE COMMERCE COMMISSION.....     | .2      | .2                  | *                             | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| LIBRARY OF CONGRESS.....                | 4.3     | 4.0                 | .3                            | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 3,876.5 | 1,104.4             | 2,520.1                       | -                        | 128.0                                | 91.0                  | 29.8                                         | 1.5                                                       | .4                | 1.3                            | -       |
| NATIONAL SCIENCE FOUNDATION.....        | 753.6   | 89.1                | 17.6                          | 0.3                      | 552.2                                | 49.9                  | 35.4                                         | .6                                                        | 4.4               | 4.3                            | -       |
| NUCLEAR REGULATORY COMMISSION.....      | 132.1   | 10.1                | 7.3                           | 77.9                     | 6.1                                  | 19.4                  | 3.1                                          | 7.3                                                       | .2                | .7                             | -       |
| SMITHSONIAN INSTITUTION.....            | 32.6    | 30.1                | -                             | -                        | 1.9                                  | -                     | .6                                           | -                                                         | -                 | -                              | -       |
| TENNESSEE VALLEY AUTHORITY.....         | 35.6    | 17.4                | -                             | -                        | .2                                   | -                     | 17.9                                         | -                                                         | -                 | -                              | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2.6     | .2                  | 1.5                           | -                        | .2                                   | .1                    | .5                                           | .1                                                        | -                 | .1                             | -       |
| US INTERNATIONAL TRADE COMMISSION.....  | 2.6     | 2.6                 | -                             | -                        | -                                    | -                     | -                                            | -                                                         | -                 | -                              | -       |
| VETERANS ADMINISTRATION.....            | 116.0   | 113.1               | 1.0                           | -                        | 1.1                                  | -                     | .6                                           | -                                                         | .1                | -                              | -       |

\* INDICATES AMOUNT LESS THAN \$50,000.

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-9. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)

(IN BILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL    | INTRA-MURAL (1) | EXTRAMURAL                    |                                    |                             |                                          |                                  |                                            |                       |         |
|----------------------------------------|----------|-----------------|-------------------------------|------------------------------------|-----------------------------|------------------------------------------|----------------------------------|--------------------------------------------|-----------------------|---------|
|                                        |          |                 | UNITED STATES AND TERRITORIES |                                    |                             |                                          |                                  |                                            |                       |         |
|                                        |          |                 | INDUSTRIAL FIRMS              | FFRDCS ADMIN BY INDUS- TRIAL FIRMS | UNIVER- SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND INSTI- TUTIONS | OTHER NON- PROFIT INSTI- TUTIONS | FFRDCS ADMIN BY NON- PROFIT INSTI- TUTIONS | STATE AND LOCAL GOVTS | FOREIGN |
| TOTAL, ALL AGENCIES.....               | 27,972.2 | 6,941.2         | 13,314.5                      | 1,201.9                            | 3,665.1                     | 1,325.6                                  | 888.0                            | 289.7                                      | 222.3                 | 123.9   |
| DEPARTMENTS                            |          |                 |                               |                                    |                             |                                          |                                  |                                            |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 636.0    | 430.9           | .7                            | -                                  | 196.0                       | -                                        | -                                | -                                          | 1.2                   | 7.2     |
| ECON, STAT & COOPERATIVES SERVICE....  | 35.8     | 35.2            | -                             | -                                  | .6                          | -                                        | -                                | -                                          | -                     | -       |
| FOREST SERVICE.....                    | 102.9    | 94.1            | .7                            | -                                  | 7.4                         | -                                        | -                                | -                                          | .7                    | -       |
| SCIENCE AND EDUCATION ADMINISTRATION   | 497.4    | 301.7           | -                             | -                                  | 188.0                       | -                                        | -                                | -                                          | .5                    | 7.2     |
| COOPERATIVE RESEARCH.....              | 157.6    | 5.7             | -                             | -                                  | 151.4                       | -                                        | -                                | -                                          | .5                    | -       |
| FEDERAL RESEARCH.....                  | 339.8    | 295.9           | -                             | -                                  | 36.7                        | -                                        | -                                | -                                          | -                     | 7.2     |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 315.1    | 214.4           | 22.9                          | .2                                 | 40.2                        | .6                                       | 18.1                             | .2                                         | 18.3                  | .3      |
| BUREAU OF THE CENSUS.....              | 3.8      | 3.6             | -                             | -                                  | .2                          | -                                        | -                                | -                                          | -                     | -       |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 40.1     | 1.6             | 2.9                           | -                                  | 10.6                        | -                                        | 13.8                             | -                                          | 11.2                  | -       |
| MARITIME ADMINISTRATION.....           | 15.0     | 1.8             | 12.5                          | -                                  | .3                          | -                                        | .2                               | -                                          | -                     | -       |
| NATIONAL BUREAU OF STANDARDS.....      | 66.0     | 65.0            | -                             | -                                  | .9                          | -                                        | -                                | -                                          | -                     | .2      |
| NATIONAL FIRE PREV & CONTROL ADMIN...  | 8.0      | 3.7             | .9                            | -                                  | 2.0                         | .4                                       | .6                               | -                                          | .5                    | -       |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 175.0    | 134.1           | 6.5                           | .2                                 | 26.3                        | .2                                       | 1.0                              | -                                          | 6.6                   | .1      |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 3.2      | 3.2             | -                             | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 3.6      | 1.1             | .2                            | -                                  | -                           | -                                        | 2.4                              | -                                          | -                     | -       |
| PATENT & TRADEMARK OFFICE.....         | .5       | .5              | -                             | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 12,837.7 | 3,426.2         | 8,438.3                       | 117.1                              | 472.6                       | 78.5                                     | 93.8                             | 176.0                                      | .4                    | 34.9    |
| DEPARTMENT OF THE ARMY.....            | 2,833.1  | 1,094.1         | 1,622.2                       | 16.7                               | 59.9                        | 13.9                                     | 18.3                             | 6.3                                        | *                     | 1.8     |
| DEPARTMENT OF THE NAVY.....            | 4,501.9  | 1,148.7         | 2,923.9                       | 100.0                              | 246.6                       | 18.0                                     | 45.8                             | 6.9                                        | -                     | 12.0    |
| DEPARTMENT OF THE AIR FORCE.....       | 4,615.6  | 916.3           | 3,372.5                       | -                                  | 126.3                       | 30.0                                     | 13.8                             | 135.7                                      | -                     | 20.9    |
| DEFENSE AGENCIES.....                  | 854.8    | 244.1           | 515.1                         | .4                                 | 39.2                        | 16.5                                     | 14.8                             | 24.5                                       | -                     | .2      |
| DEPARTMENTWIDE FUNDS.....              | 5.2      | .4              | 2.5                           | -                                  | .6                          | -                                        | 1.1                              | .3                                         | .4                    | -       |
| DIRECTOR OF TEST & EVALUATION, DEF...  | 27.0     | 22.6            | 2.1                           | -                                  | -                           | -                                        | -                                | 2.3                                        | -                     | -       |
| DEPARTMENT OF ENERGY.....              | 4,175.0  | 223.9           | 1,556.0                       | 958.1                              | 248.9                       | 1,037.4                                  | 48.9                             | 86.2                                       | 11.1                  | 4.5     |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 3,271.1  | 630.0           | 161.1                         | 26.2                               | 1,806.8                     | 7.4                                      | 502.8                            | 3.0                                        | 92.3                  | 41.5    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 203.2    | 36.3            | 5.5                           | -                                  | 120.9                       | -                                        | 31.9                             | -                                          | 6.2                   | 2.3     |
| CENTER FOR DISEASE CONTROL.....        | 63.1     | 41.5            | 5.0                           | -                                  | 7.2                         | -                                        | 5.1                              | -                                          | .2                    | 4.1     |
| FOOD AND DRUG ADMINISTRATION.....      | 49.1     | 4.2             | 6.2                           | -                                  | 9.2                         | -                                        | 2.7                              | -                                          | -                     | 1.8     |
| HEALTH CARE FINANCING ADMINISTRATION.. | 38.6     | 10.4            | 13.9                          | -                                  | 2.3                         | -                                        | 1.5                              | -                                          | 10.4                  | -       |
| HEALTH SERVICES ADMINISTRATION.....    | 17.2     | 5.3             | 2.0                           | -                                  | 5.3                         | -                                        | 3.4                              | -                                          | .5                    | .9      |
| HUMAN DEVELOPMENT SERVICES.....        | 85.7     | 4.7             | 6.5                           | -                                  | 36.2                        | -                                        | 24.9                             | -                                          | 9.9                   | 3.5     |
| NATIONAL INSTITUTE OF EDUCATION.....   | 94.4     | 14.5            | 6.6                           | -                                  | 28.3                        | -                                        | 36.4                             | -                                          | 8.4                   | .3      |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,606.3  | 465.9           | 103.1                         | 26.2                               | 1,563.2                     | 7.4                                      | 372.7                            | 3.0                                        | 39.3                  | 25.5    |
| OFFICE OF EDUCATION.....               | 33.1     | 1.6             | 7.8                           | -                                  | 15.6                        | -                                        | 6.2                              | -                                          | 1.8                   | .1      |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 1.0      | .1              | -                             | -                                  | -                           | -                                        | 1.0                              | -                                          | -                     | -       |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 37.2     | 8.9             | .3                            | -                                  | 13.6                        | -                                        | 10.3                             | -                                          | .9                    | 3.1     |
| OFFICE OF THE SECRETARY.....           | 27.0     | 2.2             | 3.0                           | -                                  | 4.2                         | -                                        | 5.8                              | -                                          | 11.9                  | -       |
| SOCIAL SECURITY ADMINISTRATION.....    | 15.1     | 9.3             | 1.2                           | -                                  | .8                          | -                                        | 1.0                              | -                                          | 2.8                   | -       |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 69.0     | 24.7            | 17.1                          | -                                  | 3.9                         | -                                        | 20.0                             | -                                          | 3.3                   | -       |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 359.4    | 274.2           | 46.2                          | -                                  | 36.1                        | -                                        | .1                               | .2                                         | 1.6                   | 1.0     |
| BUREAU OF LAND MANAGEMENT.....         | 1.1      | .5              | -                             | -                                  | .6                          | -                                        | -                                | -                                          | -                     | -       |
| BUREAU OF MINES.....                   | 103.0    | 66.0            | 30.0                          | -                                  | 6.2                         | -                                        | -                                | .2                                         | .6                    | -       |
| BUREAU OF RECLAMATION.....             | 7.2      | 4.4             | .8                            | -                                  | 1.5                         | -                                        | -                                | -                                          | .5                    | -       |
| GEOLOGICAL SURVEY.....                 | 173.5    | 161.3           | 2.0                           | -                                  | 10.2                        | -                                        | -                                | -                                          | -                     | -       |
| NATIONAL PARK SERVICE.....             | 10.5     | 6.7             | .3                            | -                                  | 3.4                         | -                                        | .1                               | -                                          | .1                    | -       |
| OFF OF SURF MINING RECLAM & ENFORCE... | 2.7      | 2.0             | -                             | -                                  | .7                          | -                                        | -                                | -                                          | -                     | -       |
| OFFICE OF THE SECRETARY.....           | 2.5      | .9              | .3                            | -                                  | .3                          | -                                        | -                                | -                                          | -                     | 1.0     |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 27.7     | 2.8             | 12.5                          | -                                  | 12.3                        | -                                        | -                                | -                                          | .1                    | -       |
| US FISH AND WILDLIFE SERVICE.....      | 31.3     | 29.5            | .4                            | -                                  | 1.1                         | -                                        | -                                | -                                          | .4                    | -       |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 42.1     | 5.2             | 5.0                           | -                                  | 8.2                         | -                                        | 19.6                             | 1.3                                        | 2.8                   | -       |
| BUREAU OF PRISONS.....                 | 3.0      | .8              | *                             | -                                  | 1.4                         | -                                        | .2                               | -                                          | .6                    | -       |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 2.3      | .8              | 1.1                           | -                                  | -                           | -                                        | -                                | .4                                         | -                     | -       |
| FEDERAL BUREAU OF INVESTIGATION.....   | 1.3      | .2              | 1.1                           | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| IMMIGRATION & NATURALIZATION SERVICE   | .4       | .1              | .3                            | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 33.1     | 3.2             | 2.1                           | -                                  | 6.1                         | -                                        | 18.7                             | .9                                         | 2.3                   | -       |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2.0      | .1              | .5                            | -                                  | .7                          | -                                        | .7                               | -                                          | -                     | -       |
| DEPARTMENT OF LABOR, TOTAL.....        | 32.1     | 10.2            | 12.1                          | -                                  | 4.4                         | -                                        | 3.8                              | -                                          | 1.6                   | -       |
| BUREAU OF LABOR STATISTICS.....        | .9       | .9              | -                             | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| EMPLOYMENT AND TRAINING ADMIN.....     | 14.3     | 2.1             | 4.1                           | -                                  | 3.2                         | -                                        | 3.4                              | -                                          | 1.8                   | -       |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 5.6      | 1.6             | -                             | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 3.1      | 5.2             | 1.1                           | -                                  | .5                          | -                                        | .3                               | -                                          | -                     | -       |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | 6.5      | .2              | 6.3                           | -                                  | -                           | -                                        | -                                | -                                          | -                     | -       |
| OFFICE OF THE SECRETARY.....           | 1.7      | .2              | .6                            | -                                  | .7                          | -                                        | .2                               | -                                          | -                     | -       |
| DEPARTMENT OF STATE, TOTAL.....        | 84.4     | 7.5             | 6.9                           | -                                  | 33.7                        | .1                                       | 15.3                             | .2                                         | -                     | 20.6    |
| DEPARTMENTAL FUNDS.....                | 2.8      | 1.2             | .9                            | -                                  | .3                          | .1                                       | .2                               | -                                          | -                     | .1      |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 81.7     | 6.3             | 6.1                           | -                                  | 33.4                        | -                                        | 15.1                             | .2                                         | -                     | 20.5    |

CONTINUED ON NEXT PAGE



TABLE C-9. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)

- CONTINUED

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL   | INTRA-<br>MURAL (1) | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                                |                                      |                                             |                                              |                                                           |      | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|----------------------------------------|---------|---------------------|---------------------------------------------|------------------------------------------------|--------------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|------|--------------------------------|---------|
|                                        |         |                     | INDUSTRIAL<br>FIRMS                         | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |      |                                |         |
| DEPT OF TRANSPORTATION, TOTAL.....     | 372.2   | 96.1                | 170.1                                       | -                                              | 21.4                                 | 0.2                                         | 8.3                                          | 10.6                                                      | 65.6 | -                              | -       |
| FEDERAL AVIATION ADMINISTRATION.....   | 106.3   | 25.7                | 69.5                                        | -                                              | 1.0                                  | .2                                          | -                                            | 9.9                                                       | -    | -                              | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....    | 57.6    | 7.6                 | 6.5                                         | -                                              | 9.3                                  | -                                           | 2.0                                          | -                                                         | 32.1 | -                              | -       |
| FEDERAL RAILROAD ADMINISTRATION.....   | 39.7    | 14.4                | 22.1                                        | -                                              | .6                                   | -                                           | .3                                           | .7                                                        | 1.6  | -                              | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..   | 52.7    | 8.7                 | 19.8                                        | -                                              | 3.6                                  | -                                           | 5.6                                          | -                                                         | 15.0 | -                              | -       |
| OFFICE OF THE SECRETARY.....           | 15.9    | 10.3                | 5.5                                         | -                                              | .1                                   | -                                           | -                                            | -                                                         | -    | -                              | -       |
| RESEARCH & SPECIAL PROGRAM DIRECTOR    | 13.9    | 6.3                 | 3.7                                         | -                                              | 3.9                                  | -                                           | -                                            | -                                                         | -    | -                              | -       |
| US COAST GUARD.....                    | 19.2    | 4.5                 | 13.5                                        | -                                              | .9                                   | -                                           | .4                                           | -                                                         | -    | -                              | -       |
| URBAN MASS TRANSPORTATION ADMIN....    | 66.9    | 18.6                | 29.5                                        | -                                              | 2.0                                  | -                                           | -                                            | -                                                         | 16.9 | -                              | -       |
| DEPARTMENT OF THE TREASURY, TOTAL..... | 7.8     | 3.7                 | 1.5                                         | -                                              | .2                                   | -                                           | -                                            | 2.4                                                       | -    | -                              | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS   | 2.6     | .4                  | -                                           | -                                              | -                                    | -                                           | -                                            | 2.2                                                       | -    | -                              | -       |
| BUREAU OF ENGRAVING AND PRINTING....   | 3.2     | 2.2                 | 1.0                                         | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| CUSTOMS SERVICE.....                   | 2.0     | 1.2                 | .5                                          | -                                              | .2                                   | -                                           | -                                            | .2                                                        | -    | -                              | -       |
| OTHER AGENCIES                         |         |                     |                                             |                                                |                                      |                                             |                                              |                                                           |      |                                |         |
| ACTION.....                            | 5.6     | .1                  | -                                           | -                                              | -                                    | -                                           | 5.5                                          | -                                                         | -    | -                              | -       |
| ADVISORY COMM ON INTERGOV'TL RELATIONS | 1.7     | 1.7                 | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| APPALACHIAN REGIONAL COMMISSION.....   | .8      | .1                  | .6                                          | -                                              | -                                    | -                                           | -                                            | -                                                         | .1   | -                              | -       |
| CIVIL AERONAUTICS BOARD.....           | .8      | .8                  | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| CIVIL SERVICE COMMISSION.....          | 4.3     | 2.3                 | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | 2.0  | -                              | -       |
| COMMUNITY SERVICES ADMINISTRATION..... | 27.0    | 1.5                 | -                                           | -                                              | -                                    | -                                           | 25.5                                         | -                                                         | -    | -                              | -       |
| CONSUMER PRODUCT SAFETY COMMISSION.... | 5.0     | 3.0                 | 1.6                                         | -                                              | -                                    | -                                           | .4                                           | -                                                         | -    | -                              | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 330.0   | 139.7               | 93.1                                        | -                                              | 48.0                                 | -                                           | 26.2                                         | 1.0                                                       | 16.0 | 6.0                            | -       |
| FEDERAL COMMUNICATIONS COMMISSION..... | 3.4     | 2.4                 | 1.0                                         | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| FEDERAL HOME LOAN BANK BOARD.....      | 1.3     | 1.2                 | -                                           | -                                              | .1                                   | -                                           | -                                            | -                                                         | -    | -                              | -       |
| FEDERAL TRADE COMMISSION.....          | 1.3     | 1.3                 | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| GENERAL SERVICES ADMINISTRATION.....   | 1.1     | .1                  | 1.0                                         | -                                              | -                                    | -                                           | .1                                           | -                                                         | -    | -                              | -       |
| INTERNATIONAL COMMUNICATION AGENCY.... | .1      | .1                  | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| INTERSTATE COMMERCE COMMISSION.....    | .1      | .1                  | .1                                          | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| LIBRARY OF CONGRESS.....               | 4.7     | 4.2                 | .5                                          | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 4,192.5 | 1,153.3             | 2,750.1                                     | -                                              | 128.0                                | 125.5                                       | 32.4                                         | 1.5                                                       | .4   | 1.3                            | -       |
| NATIONAL SCIENCE FOUNDATION.....       | 828.7   | 96.6                | 18.6                                        | 0.5                                            | 607.0                                | 55.8                                        | 39.0                                         | .6                                                        | 5.1  | 5.5                            | -       |
| NUCLEAR REGULATORY COMMISSION.....     | 155.0   | 12.1                | 7.0                                         | 99.6                                           | 5.6                                  | 20.1                                        | 2.7                                          | 6.4                                                       | .4   | 1.0                            | -       |
| SMALL BUSINESS ADMINISTRATION.....     | .1      | .1                  | .1                                          | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| SMITHSONIAN INSTITUTION.....           | 34.0    | 31.0                | -                                           | -                                              | 2.3                                  | -                                           | .7                                           | -                                                         | -    | -                              | -       |
| TENNESSEE VALLEY AUTHORITY.....        | 51.3    | 27.3                | -                                           | -                                              | .2                                   | -                                           | 23.8                                         | -                                                         | -    | -                              | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY.. | 3.7     | .3                  | 2.0                                         | .2                                             | .3                                   | .1                                          | .6                                           | .1                                                        | -    | .1                             | -       |
| US INTERNATIONAL TRADE COMMISSION....  | 2.7     | 2.7                 | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -    | -                              | -       |
| VETERANS ADMINISTRATION.....           | 115.2   | 112.3               | 1.0                                         | -                                              | 1.1                                  | -                                           | .6                                           | -                                                         | .1   | -                              | -       |

\* INDICATES AMOUNT LESS THAN \$50,000.

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-10. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1977  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL     | INTRA-MURAL (1) | UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                          |        | STATE AND LOCAL GOVTS | FOREIGN |
|-----------------------------------------|-----------|-----------------|-------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|--------|-----------------------|---------|
|                                         |           |                 | INDUS-TRIAL FIRMS             | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS |        |                       |         |
| TOTAL, ALL AGENCIES.....                | 8,841,215 | 3,037,031       | 1,613,616                     | 199,432                           | 2,612,351                  | 671,212                            | 508,945                        | 55,513                                   | 84,452 | 58,663                |         |
| DEPARTMENTS                             |           |                 |                               |                                   |                            |                                    |                                |                                          |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....   | 524,020   | 372,298         | 5,541                         | -                                 | 138,935                    | -                                  | 235                            | 173                                      | 1,017  | 5,821                 |         |
| ECON, STAT & COOPERATIVES SERVICE...    | 29,667    | 28,903          | -                             | -                                 | 764                        | -                                  | -                              | -                                        | -      | -                     |         |
| FOREST SERVICE.....                     | 80,110    | 78,207          | 607                           | -                                 | 6,920                      | -                                  | 34                             | 173                                      | 169    | -                     |         |
| SCIENCE AND EDUCATION ADMINISTRATION    | 408,243   | 265,188         | 4,934                         | -                                 | 131,251                    | -                                  | 201                            | -                                        | 848    | 5,821                 |         |
| COOPERATIVE RESEARCH.....               | 127,265   | 4,021           | -                             | -                                 | 122,728                    | -                                  | -                              | -                                        | 516    | -                     |         |
| FEDERAL RESEARCH.....                   | 280,978   | 261,167         | 4,934                         | -                                 | 8,523                      | -                                  | 201                            | -                                        | 332    | 5,821                 |         |
| DEPARTMENT OF COMMERCE, TOTAL.....      | 176,129   | 139,876         | 7,668                         | -                                 | 17,721                     | 1,131                              | 2,819                          | -                                        | 6,420  | 494                   |         |
| BUREAU OF THE CENSUS.....               | 2,008     | 1,841           | -                             | -                                 | 167                        | -                                  | -                              | -                                        | -      | -                     |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..   | 2,500     | 280             | 490                           | -                                 | 455                        | -                                  | 1,185                          | -                                        | 90     | -                     |         |
| MARITIME ADMINISTRATION.....            | 3,700     | 989             | 2,456                         | -                                 | 81                         | -                                  | 174                            | -                                        | -      | -                     |         |
| NATIONAL BUREAU OF STANDARDS.....       | 44,954    | 43,620          | 231                           | -                                 | 816                        | -                                  | 193                            | -                                        | -      | 94                    |         |
| NATIONAL FIRE PREV & CONTROL ADMIN....  | 4,476     | 2,355           | 79                            | -                                 | 1,632                      | 310                                | 100                            | -                                        | -      | -                     |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....   | 115,776   | 88,527          | 4,348                         | -                                 | 14,570                     | 821                                | 837                            | -                                        | 6,273  | 400                   |         |
| NAT'L TELECOMMUN & INFO ADMIN.....      | 2,000     | 2,000           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF MINORITY BUSINESS ENTERP...   | 715       | 264             | 64                            | -                                 | -                          | -                                  | 330                            | -                                        | 57     | -                     |         |
| DEPARTMENT OF DEFENSE, TOTAL.....       | 2,041,397 | 807,925         | 647,331                       | 442                               | 242,971                    | 80,698                             | 40,057                         | 14,553                                   | 105    | 7,315                 |         |
| DEPARTMENT OF THE ARMY.....             | 433,415   | 304,126         | 80,693                        | 37                                | 36,096                     | 195                                | 10,601                         | -                                        | 16     | 1,651                 |         |
| DEPARTMENT OF THE NAVY.....             | 377,967   | 195,774         | 49,722                        | -                                 | 63,458                     | 60,411                             | 3,917                          | 714                                      | -      | 3,971                 |         |
| DEPARTMENT OF THE AIR FORCE.....        | 835,300   | 215,289         | 512,966                       | -                                 | 98,148                     | 1,121                              | 6,273                          | -                                        | -      | 1,503                 |         |
| DEFENSE AGENCIES.....                   | 393,415   | 92,628          | 203,328                       | 405                               | 45,129                     | 18,971                             | 18,990                         | 13,774                                   | -      | 190                   |         |
| DEPARTMENTWIDE FUNDS.....               | 1,300     | 108             | 622                           | -                                 | 140                        | -                                  | 276                            | 65                                       | 89     | -                     |         |
| DEPARTMENT OF ENERGY.....               | 891,266   | 26,641          | 76,858                        | 116,199                           | 133,930                    | 485,152                            | 20,839                         | 30,951                                   | 316    | 380                   |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL  | 2,433,722 | 523,737         | 84,329                        | 23,284                            | 1,356,624                  | 6,316                              | 347,449                        | 1,900                                    | 59,461 | 30,622                |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..   | 151,966   | 28,508          | 3,107                         | -                                 | 87,743                     | -                                  | 26,323                         | -                                        | 4,702  | 1,583                 |         |
| CENTER FOR DISEASE CONTROL.....         | 55,273    | 38,994          | 4,382                         | -                                 | 5,358                      | -                                  | 4,904                          | -                                        | 146    | 1,489                 |         |
| FOOD AND DRUG ADMINISTRATION.....       | 42,872    | 25,295          | 5,418                         | -                                 | 8,425                      | -                                  | 2,193                          | -                                        | 542    | 999                   |         |
| HEALTH CARE FINANCING ADMINISTRATION... | 29,998    | 7,960           | 11,675                        | -                                 | 1,727                      | -                                  | 1,500                          | -                                        | 7,136  | -                     |         |
| HEALTH RESOURCES ADMINISTRATION.....    | 7,410     | 296             | -                             | -                                 | 7,114                      | -                                  | -                              | -                                        | -      | -                     |         |
| HEALTH SERVICES ADMINISTRATION.....     | 9,521     | 3,783           | 332                           | -                                 | 3,192                      | -                                  | 1,131                          | -                                        | 215    | 868                   |         |
| HUMAN DEVELOPMENT SERVICES.....         | 48,711    | 2,566           | 1,153                         | -                                 | 25,328                     | -                                  | 12,036                         | -                                        | 3,559  | 4,069                 |         |
| NATIONAL INSTITUTE OF EDUCATION.....    | 27,120    | 5,386           | 1,030                         | -                                 | 10,525                     | -                                  | 7,779                          | -                                        | 2,400  | -                     |         |
| NATIONAL INSTITUTES OF HEALTH.....      | 1,988,100 | 393,398         | 52,468                        | 23,284                            | 1,187,571                  | 6,316                              | 274,901                        | 1,900                                    | 28,236 | 20,026                |         |
| OFFICE OF EDUCATION.....                | 11,892    | 563             | 1,167                         | -                                 | 5,749                      | -                                  | 2,872                          | -                                        | 1,441  | 100                   |         |
| OFFICE OF ASS'T SECTY FOR EDUCATION...  | 1,037     | 75              | -                             | -                                 | -                          | -                                  | 962                            | -                                        | -      | -                     |         |
| OFFICE OF ASS'T SECTY FOR HEALTH.....   | 28,605    | 7,679           | 224                           | -                                 | 10,767                     | -                                  | 7,774                          | -                                        | 673    | 1,488                 |         |
| OFFICE OF THE SECRETARY.....            | 20,000    | 1,239           | 2,328                         | -                                 | 2,567                      | -                                  | 4,540                          | -                                        | 9,326  | -                     |         |
| SOCIAL SECURITY ADMINISTRATION.....     | 11,217    | 7,995           | 1,045                         | -                                 | 558                        | -                                  | 534                            | -                                        | 1,085  | -                     |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT...  | 32,720    | 14,365          | 6,599                         | -                                 | 3,462                      | -                                  | 8,294                          | -                                        | -      | -                     |         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....  | 237,513   | 201,167         | 11,439                        | -                                 | 22,282                     | -                                  | 501                            | -                                        | 1,519  | 1,056                 |         |
| BUREAU OF LAND MANAGEMENT.....          | 819       | 489             | -                             | -                                 | 330                        | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF MINES.....                    | 52,322    | 44,322          | 6,000                         | -                                 | 2,000                      | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF RECLAMATION.....              | 9,282     | 4,899           | 919                           | -                                 | 2,299                      | -                                  | -                              | -                                        | 1,165  | -                     |         |
| GEOLOGICAL SURVEY.....                  | 128,928   | 124,013         | 765                           | -                                 | 4,140                      | -                                  | -                              | -                                        | 10     | -                     |         |
| HERITAGE CONSERVATION & REC SERVICE..   | 20        | 20              | -                             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL PARK SERVICE.....              | 7,498     | 4,582           | 321                           | -                                 | 2,530                      | -                                  | 50                             | -                                        | 15     | -                     |         |
| OFFICE OF THE SECRETARY.....            | 4,536     | 1,459           | 1,619                         | -                                 | 402                        | -                                  | -                              | -                                        | -      | 1,056                 |         |
| OFFICE OF WATER RES AND TECHNOLOGY...   | 12,308    | 933             | 1,515                         | -                                 | 9,781                      | -                                  | -                              | -                                        | 79     | -                     |         |
| US FISH AND WILDLIFE SERVICE.....       | 21,800    | 20,450          | 300                           | -                                 | 800                        | -                                  | -                              | -                                        | 250    | -                     |         |
| DEPARTMENT OF JUSTICE, TOTAL.....       | 17,584    | 2,256           | 1,100                         | -                                 | 4,868                      | -                                  | 8,157                          | -                                        | 1,203  | -                     |         |
| BUREAU OF PRISONS.....                  | 136       | 42              | -                             | -                                 | 48                         | -                                  | -                              | -                                        | 46     | -                     |         |
| DRUG ENFORCEMENT ADMINISTRATION.....    | 900       | 400             | 500                           | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| IMMIGRATION & NATURALIZATION SERVICE    | 148       | 6               | 142                           | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....   | 16,400    | 1,808           | 458                           | -                                 | 4,820                      | -                                  | 8,157                          | -                                        | 1,157  | -                     |         |
| DEPARTMENT OF LABOR, TOTAL.....         | 18,727    | 8,801           | 4,502                         | -                                 | 4,287                      | 25                                 | 1,084                          | -                                        | 28     | -                     |         |
| BUREAU OF LABOR STATISTICS.....         | 896       | 896             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| EMPLOYMENT AND TRAINING ADMIN.....      | 6,393     | 2,230           | 461                           | -                                 | 2,790                      | -                                  | 884                            | -                                        | 28     | -                     |         |
| EMPLOYMENT STANDARDS ADMINISTRATION..   | 4,446     | 4,371           | -                             | -                                 | 75                         | -                                  | -                              | -                                        | -      | -                     |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....    | 3,306     | 992             | 767                           | -                                 | 1,347                      | -                                  | 200                            | -                                        | -      | -                     |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...   | 3,441     | 141             | 3,245                         | -                                 | 55                         | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF THE SECRETARY.....            | 245       | 171             | 29                            | -                                 | 20                         | 25                                 | -                              | -                                        | -      | -                     |         |
| DEPARTMENT OF STATE, TOTAL.....         | 38,270    | 7,079           | 1,129                         | -                                 | 21,847                     | -                                  | 3,759                          | -                                        | -      | 4,456                 |         |
| DEPARTMENTAL FUNDS.....                 | 2,065     | 1,062           | 435                           | -                                 | 290                        | -                                  | 190                            | -                                        | -      | 88                    |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT    | 36,205    | 6,017           | 694                           | -                                 | 21,557                     | -                                  | 3,569                          | -                                        | -      | 4,368                 |         |

CONTINUED ON NEXT PAGE

TABLE C-10. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL                    |                                   |                            |                                    |                                |                                          |       |       | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|-----------|-----------------|-------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|-------|-------|-----------------------|---------|
|                                        |           |                 | UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                          |       |       |                       |         |
|                                        |           |                 | INDUS-TRIAL FIRMS             | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS |       |       |                       |         |
| DEPT OF TRANSPORTATION, TOTAL.....     | 51,760    | 16,319          | 23,317                        | -                                 | 2,430                      | -                                  | 5,064                          | -                                        | 4,630 | -     | -                     |         |
| FEDERAL AVIATION ADMINISTRATION.....   | 4,700     | 1,050           | 3,250                         | -                                 | 400                        | -                                  | -                              | -                                        | -     | -     | -                     |         |
| FEDERAL HIGHWAY ADMINISTRATION.....    | 5,300     | 1,024           | 1,700                         | -                                 | 500                        | -                                  | 1,875                          | -                                        | 201   | -     | -                     |         |
| FEDERAL RAILROAD ADMINISTRATION.....   | 6,600     | 5,140           | 1,460                         | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..   | 27,500    | 6,195           | 13,894                        | -                                 | 1,200                      | -                                  | 3,147                          | -                                        | 3,064 | -     | -                     |         |
| OFFICE OF THE SECRETARY.....           | 4,160     | 1,573           | 1,330                         | -                                 | 250                        | -                                  | 42                             | -                                        | 965   | -     | -                     |         |
| US COAST GUARD.....                    | 2,500     | 737             | 1,683                         | -                                 | 80                         | -                                  | -                              | -                                        | -     | -     | -                     |         |
| URBAN MASS TRANSPORTATION ADMIN.....   | 1,000     | 600             | -                             | -                                 | -                          | -                                  | -                              | -                                        | 400   | -     | -                     |         |
| DEPARTMENT OF THE TREASURY, TOTAL..... | 2,140     | 1,790           | -                             | -                                 | -                          | -                                  | -                              | 350                                      | -     | -     | -                     |         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS   | 440       | 90              | -                             | -                                 | -                          | -                                  | -                              | 350                                      | -     | -     | -                     |         |
| BUREAU OF ENGRAVING AND PRINTING....   | 1,700     | 1,700           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| OTHER AGENCIES                         |           |                 |                               |                                   |                            |                                    |                                |                                          |       |       |                       |         |
| ACTION.....                            | 100       | 29              | -                             | -                                 | -                          | -                                  | 71                             | -                                        | -     | -     | -                     |         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS | 1,526     | 1,526           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| APPALACHIAN REGIONAL COMMISSION.....   | 562       | 108             | 374                           | -                                 | -                          | -                                  | -                              | -                                        | 80    | -     | -                     |         |
| CIVIL AERONAUTICS BOARD.....           | 535       | 535             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| CIVIL SERVICE COMMISSION.....          | 1,085     | 1,085           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| COMMUNITY SERVICES ADMINISTRATION..... | 1,000     | 10              | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| CONSUMER PRODUCT SAFETY COMMISSION.... | 3,710     | 2,092           | 415                           | -                                 | 127                        | -                                  | 1,076                          | -                                        | -     | -     | -                     |         |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 205,252   | 84,005          | 56,630                        | -                                 | 45,610                     | -                                  | 9,905                          | 685                                      | 5,704 | 2,713 | -                     |         |
| FEDERAL COMMUNICATIONS COMMISSION..... | 2,043     | 1,691           | 352                           | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| FEDERAL HOME LOAN BANK BOARD.....      | 1,665     | 1,482           | -                             | -                                 | 183                        | -                                  | -                              | -                                        | -     | -     | -                     |         |
| FEDERAL TRADE COMMISSION.....          | 1,111     | 1,111           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| GENERAL SERVICES ADMINISTRATION.....   | 386       | 48              | 270                           | -                                 | -                          | -                                  | 68                             | -                                        | -     | -     | -                     |         |
| INTERNATIONAL COMMUNICATION AGENCY.... | 71        | 65              | 6                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| INTERSTATE COMMERCE COMMISSION.....    | 64        | 64              | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| LIBRARY OF CONGRESS.....               | 400       | 400             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 1,206,076 | 602,100         | 460,501                       | -                                 | 105,059                    | 27,907                             | 7,693                          | 1,262                                    | 111   | 1,443 | -                     |         |
| NATIONAL SCIENCE FOUNDATION.....       | 688,300   | 79,503          | 14,645                        | 397                               | 504,670                    | 47,768                             | 33,747                         | 527                                      | 3,572 | 3,471 | -                     |         |
| NUCLEAR REGULATORY COMMISSION.....     | 112,291   | 9,358           | 8,209                         | 59,110                            | 4,453                      | 22,205                             | 2,837                          | 5,062                                    | 165   | 892   | -                     |         |
| SMALL BUSINESS ADMINISTRATION.....     | 466       | 332             | 134                           | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| SMITHSONIAN INSTITUTION.....           | 29,651    | 27,293          | -                             | -                                 | 1,795                      | -                                  | 563                            | -                                        | -     | -     | -                     |         |
| TENNESSEE VALLEY AUTHORITY.....        | 22,886    | 9,429           | -                             | -                                 | 135                        | -                                  | 13,322                         | -                                        | -     | -     | -                     |         |
| US ARMS CONTROL & DISARMAMENT AGENCY.. | 1,796     | 30              | 1,349                         | -                                 | 30                         | 10                                 | 327                            | 50                                       | -     | -     | -                     |         |
| US INTERNATIONAL TRADE COMMISSION..... | 2,649     | 2,649           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| VETERANS ADMINISTRATION.....           | 92,342    | 89,832          | 918                           | -                                 | 932                        | -                                  | 539                            | -                                        | 121   | -     | -                     |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-11. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-MURAL(1) | EXTRAMURAL        |                                   |                            |                                    |                                |                                    |        |        | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|-----------|----------------|-------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------|--------|--------|-----------------------|---------|
|                                        |           |                | INDUS-TRIAL FIRMS | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS BY NON-PROFIT INSTI-TUTIONS |        |        |                       |         |
| TOTAL, ALL AGENCIES.....               | 9,857,531 | 3,259,845      | 1,909,994         | 229,862                           | 2,962,627                  | 662,870                            | 600,511                        | 56,400                             | 98,766 | 76,656 |                       |         |
| DEPARTMENTS                            |           |                |                   |                                   |                            |                                    |                                |                                    |        |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 606,536   | 424,926        | 215               | -                                 | 172,923                    | -                                  | -                              | -                                  | 772    | 7,700  |                       |         |
| ECON, STAT & COOPERATIVES SERVICE....  | 33,899    | 32,942         | -                 | -                                 | 957                        | -                                  | -                              | -                                  | -      | -      |                       |         |
| FOREST SERVICE.....                    | 101,485   | 92,385         | 215               | -                                 | 8,685                      | -                                  | -                              | -                                  | 200    | -      |                       |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 471,152   | 299,599        | -                 | -                                 | 163,281                    | -                                  | -                              | -                                  | 572    | 7,700  |                       |         |
| COOPERATIVE RESEARCH.....              | 157,674   | 5,384          | -                 | -                                 | 151,718                    | -                                  | -                              | -                                  | 572    | -      |                       |         |
| FEDERAL RESEARCH.....                  | 313,478   | 294,215        | -                 | -                                 | 11,563                     | -                                  | -                              | -                                  | -      | 7,700  |                       |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 193,250   | 151,611        | 8,302             | -                                 | 21,575                     | 486                                | 4,151                          | -                                  | 6,825  | 300    |                       |         |
| BUREAU OF THE CENSUS.....              | 2,182     | 1,988          | -                 | -                                 | 194                        | -                                  | -                              | -                                  | -      | -      |                       |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 5,500     | 975            | -                 | -                                 | 2,250                      | -                                  | 1,900                          | -                                  | 375    | -      |                       |         |
| MARITIME ADMINISTRATION.....           | 4,400     | 750            | 3,420             | -                                 | 100                        | -                                  | 130                            | -                                  | -      | -      |                       |         |
| NATIONAL BUREAU OF STANDARDS.....      | 46,908    | 45,838         | -                 | -                                 | 820                        | -                                  | -                              | -                                  | -      | 250    |                       |         |
| NATIONAL FIRE PREV & CONTROL ADMIN...  | 4,690     | 2,551          | 79                | -                                 | 1,650                      | 310                                | 100                            | -                                  | -      | -      |                       |         |
| NATIONAL OCEANIC AND ATMOS ADMIN....   | 126,870   | 97,484         | 4,758             | -                                 | 16,561                     | 176                                | 1,391                          | -                                  | 6,450  | 50     |                       |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 1,800     | 1,800          | -                 | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| OFFICE OF MINORITY BUSINESS ENTERP..   | 900       | 225            | 45                | -                                 | -                          | -                                  | 630                            | -                                  | -      | -      |                       |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 2,143,359 | 762,242        | 1,010,688         | 815                               | 272,092                    | 29,699                             | 44,005                         | 14,266                             | 490    | 9,082  |                       |         |
| DEPARTMENT OF THE ARMY.....            | 439,444   | 304,964        | 82,789            | -                                 | 39,143                     | 100                                | 11,086                         | -                                  | 7      | 1,355  |                       |         |
| DEPARTMENT OF THE NAVY.....            | 402,756   | 197,869        | 100,368           | -                                 | 82,218                     | 11,360                             | 4,380                          | 767                                | -      | 5,794  |                       |         |
| DEPARTMENT OF THE AIR FORCE.....       | 865,700   | 168,055        | 577,035           | -                                 | 108,711                    | 1,098                              | 9,100                          | -                                  | -      | 1,701  |                       |         |
| DEFENSE AGENCIES.....                  | 428,559   | 90,802         | 247,184           | 815                               | 41,261                     | 17,141                             | 17,990                         | 13,154                             | -      | 212    |                       |         |
| DEPARTMENT-WIDE FUNDS.....             | 6,900     | 552            | 3,312             | -                                 | 759                        | -                                  | 1,449                          | 345                                | 483    | -      |                       |         |
| DEPARTMENT OF ENERGY.....              | 1,005,170 | 32,694         | 91,255            | 124,703                           | 163,604                    | 528,389                            | 34,441                         | 28,841                             | 704    | 539    |                       |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 2,750,256 | 573,463        | 95,951            | 26,155                            | 1,548,249                  | 7,293                              | 388,296                        | 2,535                              | 71,227 | 37,087 |                       |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 162,364   | 33,522         | 2,861             | -                                 | 92,878                     | -                                  | 26,050                         | -                                  | 4,990  | 2,063  |                       |         |
| CENTER FOR DISEASE CONTROL.....        | 62,664    | 40,102         | 4,967             | -                                 | 7,000                      | -                                  | 5,523                          | -                                  | 165    | 4,907  |                       |         |
| FOOD AND DRUG ADMINISTRATION.....      | 48,600    | 30,057         | 5,865             | -                                 | 8,720                      | -                                  | 2,557                          | -                                  | -      | 1,401  |                       |         |
| HEALTH CARE FINANCING ADMINISTRATION.. | 35,065    | 9,389          | 12,636            | -                                 | 2,174                      | -                                  | 1,260                          | -                                  | 9,606  | -      |                       |         |
| HEALTH RESOURCES ADMINISTRATION.....   | 5,000     | 200            | -                 | -                                 | 4,800                      | -                                  | -                              | -                                  | -      | -      |                       |         |
| HEALTH SERVICES ADMINISTRATION.....    | 9,786     | 4,300          | 332               | -                                 | 3,192                      | -                                  | 1,131                          | -                                  | 215    | 616    |                       |         |
| HUMAN DEVELOPMENT SERVICES.....        | 49,847    | 2,833          | 1,182             | -                                 | 27,812                     | -                                  | 13,370                         | -                                  | 3,820  | 830    |                       |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 37,000    | 6,370          | 1,480             | -                                 | 14,772                     | -                                  | 11,078                         | -                                  | 3,300  | -      |                       |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,245,900 | 428,307        | 58,938            | 26,155                            | 1,359,946                  | 6,993                              | 308,521                        | 2,135                              | 31,695 | 23,210 |                       |         |
| OFFICE OF EDUCATION.....               | 14,255    | 651            | 2,833             | -                                 | 7,143                      | 300                                | 2,755                          | 400                                | 731    | 100    |                       |         |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 1,042     | 80             | -                 | -                                 | -                          | -                                  | 962                            | -                                  | -      | -      |                       |         |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 35,681    | 7,213          | 299               | -                                 | 15,499                     | -                                  | 7,805                          | -                                  | 905    | 3,960  |                       |         |
| OFFICE OF THE SECRETARY.....           | 30,000    | 1,851          | 3,558             | -                                 | 3,509                      | -                                  | 6,784                          | -                                  | 14,298 | -      |                       |         |
| SOCIAL SECURITY ADMINISTRATION.....    | 13,052    | 8,588          | 1,000             | -                                 | 804                        | -                                  | 500                            | -                                  | 2,160  | -      |                       |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 38,100    | 13,400         | 9,910             | -                                 | 3,890                      | -                                  | 10,900                         | -                                  | -      | -      |                       |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 295,945   | 240,029        | 17,999            | -                                 | 35,158                     | -                                  | 50                             | -                                  | 1,719  | 990    |                       |         |
| BUREAU OF LAND MANAGEMENT.....         | 1,078     | 462            | -                 | -                                 | 616                        | -                                  | -                              | -                                  | -      | -      |                       |         |
| BUREAU OF MINES.....                   | 60,065    | 51,065         | 7,000             | -                                 | 2,000                      | -                                  | -                              | -                                  | -      | -      |                       |         |
| BUREAU OF RECLAMATION.....             | 10,923    | 6,036          | 1,425             | -                                 | 2,121                      | -                                  | -                              | -                                  | 1,341  | -      |                       |         |
| GEOLOGICAL SURVEY.....                 | 162,565   | 149,388        | 4,027             | -                                 | 9,150                      | -                                  | -                              | -                                  | -      | -      |                       |         |
| NATIONAL PARK SERVICE.....             | 9,500     | 6,210          | 342               | -                                 | 2,850                      | -                                  | 50                             | -                                  | 48     | -      |                       |         |
| OFF OF SURF MINING RECLAM & ENFORCE..  | 7,800     | 1,700          | -                 | -                                 | 6,100                      | -                                  | -                              | -                                  | -      | -      |                       |         |
| OFFICE OF THE SECRETARY.....           | 3,299     | 1,436          | 476               | -                                 | 397                        | -                                  | -                              | -                                  | -      | 990    |                       |         |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 17,515    | 2,032          | 4,429             | -                                 | 10,974                     | -                                  | -                              | -                                  | 80     | -      |                       |         |
| US FISH AND WILDLIFE SERVICE.....      | 23,200    | 21,700         | 300               | -                                 | 950                        | -                                  | -                              | -                                  | 250    | -      |                       |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 47,750    | 3,429          | 3,604             | -                                 | 8,284                      | -                                  | 30,802                         | 300                                | 1,331  | -      |                       |         |
| BUREAU OF PRISONS.....                 | 746       | 100            | -                 | -                                 | 346                        | -                                  | -                              | -                                  | 300    | -      |                       |         |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 2,300     | 1,000          | 1,300             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| IMMIGRATION & NATURALIZATION SERVICE   | 304       | 100            | 204               | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 42,400    | 2,129          | 1,600             | -                                 | 7,238                      | -                                  | 30,102                         | 300                                | 1,031  | -      |                       |         |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2,000     | 100            | 500               | -                                 | 700                        | -                                  | 700                            | -                                  | -      | -      |                       |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 19,716    | 9,911          | 6,373             | -                                 | 2,332                      | -                                  | 900                            | -                                  | 200    | -      |                       |         |
| BUREAU OF LABOR STATISTICS.....        | 742       | 742            | -                 | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,622     | 2,087          | 961               | -                                 | 1,812                      | -                                  | 562                            | -                                  | 200    | -      |                       |         |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 5,583     | 5,583          | -                 | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 3,025     | 1,170          | 1,097             | -                                 | 500                        | -                                  | 258                            | -                                  | -      | -      |                       |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | 4,499     | 199            | 4,300             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| OFFICE OF THE SECRETARY.....           | 245       | 130            | 15                | -                                 | 20                         | -                                  | 80                             | -                                  | -      | -      |                       |         |
| DEPARTMENT OF STATE, TOTAL.....        | 35,835    | 4,447          | 1,344             | -                                 | 14,881                     | -                                  | 3,651                          | -                                  | -      | 11,512 |                       |         |
| DEPARTMENTAL FUNDS.....                | 2,427     | 1,238          | 509               | -                                 | 340                        | -                                  | 243                            | -                                  | -      | 97     |                       |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 33,408    | 3,209          | 835               | -                                 | 14,541                     | -                                  | 3,408                          | -                                  | -      | 11,415 |                       |         |

CONTINUED ON NEXT PAGE

TABLE C-11. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)

- CONTINUED

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL                    |                                   |                            |                                    |                                |                                          |                       |       | FOREIGN |
|-----------------------------------------|-----------|-----------------|-------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|-----------------------|-------|---------|
|                                         |           |                 | UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                          |                       |       |         |
|                                         |           |                 | INDUS-TRIAL FIRMS             | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS | STATE AND LOCAL GOVTS |       |         |
| DEPT OF TRANSPORTATION, TOTAL.....      | 57,800    | 18,568          | 26,382                        | -                                 | 2,415                      | -                                  | 5,191                          | -                                        | 5,244                 | -     |         |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,700     | 1,720           | 5,735                         | -                                 | 245                        | -                                  | -                              | -                                        | -                     | -     |         |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,200     | 1,015           | 1,660                         | -                                 | 500                        | -                                  | 1,830                          | -                                        | 195                   | -     |         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 8,300     | 6,464           | 1,836                         | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 28,800    | 6,500           | 14,575                        | -                                 | 1,200                      | -                                  | 3,301                          | -                                        | 3,224                 | -     |         |
| OFFICE OF THE SECRETARY.....            | 5,500     | 1,940           | 1,825                         | -                                 | 350                        | -                                  | 60                             | -                                        | 1,325                 | -     |         |
| US COAST GUARD.....                     | 1,200     | 329             | 751                           | -                                 | 120                        | -                                  | -                              | -                                        | -                     | -     |         |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,100     | 600             | -                             | -                                 | -                          | -                                  | -                              | -                                        | 500                   | -     |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,292     | 1,200           | 692                           | -                                 | -                          | -                                  | -                              | 400                                      | -                     | -     |         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 492       | 92              | -                             | -                                 | -                          | -                                  | -                              | 400                                      | -                     | -     |         |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,800     | 1,108           | 692                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| OTHER AGENCIES                          |           |                 |                               |                                   |                            |                                    |                                |                                          |                       |       |         |
| ACTION.....                             | 466       | 41              | -                             | -                                 | -                          | -                                  | 425                            | -                                        | -                     | -     |         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,659     | 1,659           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| APPALACHIAN REGIONAL COMMISSION.....    | 600       | 100             | 500                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| CIVIL AERONAUTICS BOARD.....            | 734       | 734             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| CIVIL SERVICE COMMISSION.....           | 1,127     | 1,127           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000     | 101             | -                             | -                                 | -                          | -                                  | 990                            | -                                        | -                     | -     |         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 1,763     | 1,395           | 168                           | -                                 | -                          | -                                  | 200                            | -                                        | -                     | -     |         |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 237,800   | 105,541         | 66,486                        | -                                 | 45,423                     | -                                  | 11,000                         | 800                                      | 5,400                 | 3,150 |         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,959     | 2,218           | 741                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,113     | 1,033           | -                             | -                                 | 80                         | -                                  | -                              | -                                        | -                     | -     |         |
| FEDERAL TRADE COMMISSION.....           | 1,335     | 1,335           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| GENERAL SERVICES ADMINISTRATION.....    | 1,741     | 1,355           | 354                           | -                                 | -                          | -                                  | 32                             | -                                        | -                     | -     |         |
| INTERNATIONAL COMMUNICATION AGENCY..... | 141       | 104             | 37                            | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| INTERSTATE COMMERCE COMMISSION.....     | 216       | 184             | 32                            | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| LIBRARY OF CONGRESS.....                | 400       | 400             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 1,358,509 | 663,136         | 542,445                       | -                                 | 114,000                    | 27,580                             | 8,675                          | 1,303                                    | 120                   | 1,250 |         |
| NATIONAL SCIENCE FOUNDATION.....        | 748,327   | 89,056          | 17,192                        | 295                               | 548,425                    | 49,896                             | 34,201                         | 613                                      | 4,380                 | 4,269 |         |
| NUCLEAR REGULATORY COMMISSION.....      | 132,139   | 10,116          | 7,285                         | 77,894                            | 6,088                      | 19,447                             | 3,073                          | 7,267                                    | 232                   | 737   |         |
| SMITHSONIAN INSTITUTION.....            | 32,553    | 30,110          | -                             | -                                 | 1,860                      | -                                  | 583                            | -                                        | -                     | -     |         |
| TENNESSEE VALLEY AUTHORITY.....         | 30,821    | 12,670          | -                             | -                                 | 204                        | -                                  | 17,947                         | -                                        | -                     | -     |         |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,145     | 120             | 1,150                         | -                                 | 205                        | 80                                 | 455                            | 75                                       | -                     | 60    |         |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,622     | 2,622           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| VETERANS ADMINISTRATION.....            | 101,352   | 98,859          | 889                           | -                                 | 939                        | -                                  | 543                            | -                                        | 122                   | -     |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-12. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL      | INTRA-MURAL (1) | EXTRAMURAL                    |                                   |                            |                                    |                                |                                          |        |                       | FOREIGN |
|-----------------------------------------|------------|-----------------|-------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|--------|-----------------------|---------|
|                                         |            |                 | UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                          |        | STATE AND LOCAL GOVTS |         |
|                                         |            |                 | INDUS-TRIAL FIRMS             | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS |        |                       |         |
| TOTAL, ALL AGENCIES.....                | 10,482,667 | 3,413,434       | 2,062,774                     | 255,338                           | 3,218,858                  | 696,152                            | 599,963                        | 53,989                                   | 99,137 | 83,022                |         |
| DEPARTMENTS                             |            |                 |                               |                                   |                            |                                    |                                |                                          |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....   | 611,467    | 410,685         | 725                           | -                                 | 191,873                    | -                                  | -                              | -                                        | 1,189  | 6,995                 |         |
| ECON, STAT & COOPERATIVES SERVICE....   | 34,899     | 34,382          | -                             | -                                 | 517                        | -                                  | -                              | -                                        | -      | -                     |         |
| FOREST SERVICE.....                     | 98,018     | 89,218          | 725                           | -                                 | 7,400                      | -                                  | -                              | -                                        | 675    | -                     |         |
| SCIENCE AND EDUCATION ADMINISTRATION    | 478,550    | 287,085         | -                             | -                                 | 183,956                    | -                                  | -                              | -                                        | 514    | 6,995                 |         |
| COOPERATIVE RESEARCH.....               | 157,599    | 5,733           | -                             | -                                 | 151,352                    | -                                  | -                              | -                                        | 514    | -                     |         |
| FEDERAL RESEARCH.....                   | 320,951    | 281,352         | -                             | -                                 | 32,604                     | -                                  | -                              | -                                        | -      | 6,995                 |         |
| DEPARTMENT OF COMMERCE, TOTAL.....      | 220,082    | 176,657         | 6,118                         | -                                 | 25,551                     | 555                                | 4,190                          | -                                        | 6,750  | 261                   |         |
| BUREAU OF THE CENSUS.....               | 2,680      | 2,444           | -                             | -                                 | 236                        | -                                  | -                              | -                                        | -      | -                     |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..   | 5,500      | 610             | 1,120                         | -                                 | 965                        | -                                  | 2,595                          | -                                        | 210    | -                     |         |
| MARITIME ADMINISTRATION.....            | 3,700      | 800             | 2,800                         | -                                 | 100                        | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL BUREAU OF STANDARDS.....       | 56,134     | 55,139          | -                             | -                                 | 820                        | -                                  | -                              | -                                        | -      | 175                   |         |
| NATIONAL FIRE PREV & CONTROL ADMIN....  | 4,798      | 2,659           | 79                            | -                                 | 1,650                      | 310                                | 100                            | -                                        | -      | -                     |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....   | 143,970    | 112,305         | 2,079                         | -                                 | 21,780                     | 245                                | 935                            | -                                        | 6,540  | 86                    |         |
| NAT'L TELECOMM & INFO ADMIN.....        | 2,300      | 2,300           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF MINORITY BUSINESS ENTERP....  | 1,000      | 400             | 40                            | -                                 | -                          | -                                  | 560                            | -                                        | -      | -                     |         |
| DEPARTMENT OF DEFENSE, TOTAL.....       | 2,319,507  | 794,403         | 1,119,059                     | 370                               | 306,064                    | 30,189                             | 41,383                         | 17,490                                   | 379    | 10,170                |         |
| DEPARTMENT OF THE ARMY.....             | 476,312    | 311,633         | 103,906                       | -                                 | 47,741                     | 100                                | 11,347                         | -                                        | 15     | 1,570                 |         |
| DEPARTMENT OF THE NAVY.....             | 445,454    | 210,213         | 112,908                       | -                                 | 96,503                     | 12,170                             | 5,835                          | 1,106                                    | -      | 6,719                 |         |
| DEPARTMENT OF THE AIR FORCE.....        | 885,400    | 164,169         | 584,454                       | -                                 | 123,062                    | 1,398                              | 10,618                         | -                                        | -      | 1,699                 |         |
| DEFENSE AGENCIES.....                   | 507,141    | 107,972         | 315,295                       | 370                               | 38,186                     | 16,521                             | 12,491                         | 16,124                                   | -      | 182                   |         |
| DEPARTMENTWIDE FUNDS.....               | 5,200      | 416             | 2,496                         | -                                 | 572                        | -                                  | 1,092                          | 260                                      | 364    | -                     |         |
| DEPARTMENT OF ENERGY.....               | 1,074,363  | 34,582          | 108,855                       | 128,602                           | 202,942                    | 544,090                            | 30,455                         | 23,665                                   | 815    | 357                   |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL  | 2,885,845  | 599,456         | 96,732                        | 26,204                            | 1,649,217                  | 7,382                              | 396,798                        | 2,210                                    | 72,349 | 35,497                |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..   | 201,411    | 36,300          | 3,731                         | -                                 | 120,911                    | -                                  | 31,938                         | -                                        | 6,238  | 2,293                 |         |
| CENTER FOR DISEASE CONTROL.....         | 63,075     | 41,526          | 5,000                         | -                                 | 7,200                      | -                                  | 5,051                          | -                                        | 184    | 4,114                 |         |
| FOOD AND DRUG ADMINISTRATION.....       | 49,147     | 29,370          | 6,156                         | -                                 | 9,164                      | -                                  | 2,682                          | -                                        | -      | 1,775                 |         |
| HEALTH CARE FINANCING ADMINISTRATION..  | 38,552     | 10,409          | 13,878                        | -                                 | 2,313                      | -                                  | 1,542                          | -                                        | 10,410 | -                     |         |
| HEALTH SERVICES ADMINISTRATION.....     | 10,020     | 4,300           | 332                           | -                                 | 3,192                      | -                                  | 1,131                          | -                                        | 215    | 850                   |         |
| HUMAN DEVELOPMENT SERVICES.....         | 53,822     | 2,870           | 1,355                         | -                                 | 28,200                     | -                                  | 13,808                         | -                                        | 4,099  | 3,490                 |         |
| NATIONAL INSTITUTE OF EDUCATION.....    | 46,900     | 7,206           | 1,876                         | -                                 | 19,243                     | -                                  | 14,373                         | -                                        | 4,202  | -                     |         |
| NATIONAL INSTITUTES OF HEALTH.....      | 2,330,800  | 448,065         | 56,042                        | 26,204                            | 1,433,733                  | 7,382                              | 306,013                        | 2,210                                    | 31,401 | 19,750                |         |
| OFFICE OF EDUCATION.....                | 16,727     | 742             | 3,889                         | -                                 | 8,349                      | -                                  | 3,574                          | -                                        | 73     | 100                   |         |
| OFFICE OF ASS'T SECY FOR EDUCATION..... | 1,042      | 80              | -                             | -                                 | -                          | -                                  | 962                            | -                                        | -      | -                     |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....    | 32,265     | 7,151           | 279                           | -                                 | 11,912                     | -                                  | 8,949                          | -                                        | 849    | 3,125                 |         |
| OFFICE OF THE SECRETARY.....            | 27,000     | 2,170           | 2,994                         | -                                 | 4,200                      | -                                  | 5,775                          | -                                        | 11,861 | -                     |         |
| SOCIAL SECURITY ADMINISTRATION.....     | 15,084     | 9,267           | 1,200                         | -                                 | 800                        | -                                  | 1,000                          | -                                        | 2,817  | -                     |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT...  | 36,268     | 13,400          | 7,968                         | -                                 | 3,900                      | -                                  | 11,000                         | -                                        | -      | -                     |         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....  | 297,811    | 249,477         | 14,619                        | -                                 | 31,630                     | -                                  | 50                             | -                                        | 1,035  | 1,000                 |         |
| BUREAU OF LAND MANAGEMENT.....          | 1,035      | 430             | -                             | -                                 | 605                        | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF MINES.....                    | 57,265     | 49,265          | 6,000                         | -                                 | 2,000                      | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF RECLAMATION.....              | 6,332      | 3,517           | 788                           | -                                 | 1,505                      | -                                  | -                              | -                                        | 522    | -                     |         |
| GEOLOGICAL SURVEY.....                  | 173,487    | 161,338         | 1,999                         | -                                 | 10,150                     | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL PARK SERVICE.....              | 10,000     | 6,550           | 300                           | -                                 | 3,030                      | -                                  | 50                             | -                                        | 70     | -                     |         |
| OFF OF SURF MINING RECLAM & ENFORCE..   | 2,700      | 2,000           | -                             | -                                 | 700                        | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF THE SECRETARY.....            | 2,479      | 917             | 307                           | -                                 | 255                        | -                                  | -                              | -                                        | -      | 1,000                 |         |
| OFFICE OF WATER RES AND TECHNOLOGY...   | 19,513     | 2,260           | 4,875                         | -                                 | 12,285                     | -                                  | -                              | -                                        | 93     | -                     |         |
| US FISH AND WILDLIFE SERVICE.....       | 25,000     | 23,200          | 350                           | -                                 | 1,100                      | -                                  | -                              | -                                        | 350    | -                     |         |
| DEPARTMENT OF JUSTICE, TOTAL.....       | 31,131     | 3,305           | 1,825                         | -                                 | 7,246                      | -                                  | 16,477                         | 700                                      | 1,578  | -                     |         |
| BUREAU OF PRISONS.....                  | 1,331      | 174             | -                             | -                                 | 831                        | -                                  | -                              | -                                        | 326    | -                     |         |
| DRUG ENFORCEMENT ADMINISTRATION.....    | 900        | 400             | 500                           | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| IMMIGRATION & NATURALIZATION SERVICE..  | 100        | 25              | 75                            | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....   | 26,800     | 2,606           | 750                           | -                                 | 5,715                      | -                                  | 15,777                         | 700                                      | 1,252  | -                     |         |
| OFFICE OF THE ATTORNEY GENERAL.....     | 2,000      | 100             | 500                           | -                                 | 700                        | -                                  | 700                            | -                                        | -      | -                     |         |
| DEPARTMENT OF LABOR, TOTAL.....         | 23,477     | 10,150          | 8,977                         | -                                 | 3,255                      | -                                  | 995                            | -                                        | 100    | -                     |         |
| BUREAU OF LABOR STATISTICS.....         | 860        | 860             | -                             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| EMPLOYMENT AND TRAINING ADMIN.....      | 5,758      | 2,047           | 1,004                         | -                                 | 2,020                      | -                                  | 587                            | -                                        | 100    | -                     |         |
| EMPLOYMENT STANDARDS ADMINISTRATION..   | 5,593      | 5,593           | -                             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....    | 3,050      | 1,170           | 1,122                         | -                                 | 500                        | -                                  | 258                            | -                                        | -      | -                     |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN....  | 6,546      | 246             | 6,300                         | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF THE SECRETARY.....            | 1,670      | 234             | 551                           | -                                 | 735                        | -                                  | 150                            | -                                        | -      | -                     |         |
| DEPARTMENT OF STATE, TOTAL.....         | 51,772     | 6,739           | 1,973                         | -                                 | 22,181                     | -                                  | 2,715                          | -                                        | -      | 18,164                |         |
| DEPARTMENTAL FUNDS.....                 | 2,254      | 1,150           | 473                           | -                                 | 315                        | -                                  | 226                            | -                                        | -      | 90                    |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT..  | 49,518     | 5,589           | 1,500                         | -                                 | 21,866                     | -                                  | 2,489                          | -                                        | -      | 18,074                |         |

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TABLE C-12. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                          |                       |       | FOREIGN |
|-----------------------------------------|-----------|-----------------|---------------------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|-----------------------|-------|---------|
|                                         |           |                 | INDUS-TRIAL FIRMS                           | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS | STATE AND LOCAL GOVTS |       |         |
| DEPT OF TRANSPORTATION, TOTAL.....      | 60,160    | 18,894          | 29,392                                      | -                                 | 2,090                      | -                                  | 5,596                          | -                                        | 4,188                 | -     |         |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,400     | 1,645           | 5,485                                       | -                                 | 270                        | -                                  | -                              | -                                        | -                     | -     |         |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,700     | 1,115           | 1,840                                       | -                                 | 500                        | -                                  | 2,030                          | -                                        | 215                   | -     |         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 6,800     | 5,295           | 1,505                                       | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 31,000    | 7,019           | 15,742                                      | -                                 | 1,200                      | -                                  | 3,566                          | -                                        | 3,473                 | -     |         |
| OFFICE OF THE SECRETARY.....            | 2,420     | 1,120           | 1,300                                       | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE  | 2,040     | 940             | 1,100                                       | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| US COAST GUARD.....                     | 3,600     | 1,060           | 2,420                                       | -                                 | 120                        | -                                  | -                              | -                                        | -                     | -     |         |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,200     | 700             | -                                           | -                                 | -                          | -                                  | -                              | -                                        | 500                   | -     |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,650     | 1,509           | 681                                         | -                                 | -                          | -                                  | -                              | 460                                      | -                     | -     |         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 550       | 90              | -                                           | -                                 | -                          | -                                  | -                              | 460                                      | -                     | -     |         |
| BUREAU OF ENGRAVING AND PRINTING.....   | 2,100     | 1,419           | 681                                         | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| OTHER AGENCIES                          |           |                 |                                             |                                   |                            |                                    |                                |                                          |                       |       |         |
| ACTION.....                             | 3,882     | 41              | -                                           | -                                 | -                          | -                                  | 3,841                          | -                                        | -                     | -     |         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,664     | 1,664           | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| APPALACHIAN REGIONAL COMMISSION.....    | 600       | 100             | 500                                         | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| CIVIL AERONAUTICS BOARD.....            | 836       | 836             | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| CIVIL SERVICE COMMISSION.....           | 1,127     | 1,127           | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000     | 101             | -                                           | -                                 | -                          | -                                  | 999                            | -                                        | -                     | -     |         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 2,050     | 1,590           | 210                                         | -                                 | -                          | -                                  | 250                            | -                                        | -                     | -     |         |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 236,100   | 102,094         | 67,106                                      | -                                 | 48,000                     | -                                  | 10,200                         | 1,000                                    | 5,000                 | 2,700 |         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 3,365     | 2,364           | 1,001                                       | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,316     | 1,176           | -                                           | -                                 | 140                        | -                                  | -                              | -                                        | -                     | -     |         |
| FEDERAL TRADE COMMISSION.....           | 1,319     | 1,319           | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| GENERAL SERVICES ADMINISTRATION.....    | 401       | 69              | 300                                         | -                                 | -                          | -                                  | 32                             | -                                        | -                     | -     |         |
| INTERNATIONAL COMMUNICATION AGENCY..... | 100       | 100             | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| INTERSTATE COMMERCE COMMISSION.....     | 65        | 35              | 30                                          | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| LIBRARY OF CONGRESS.....                | 400       | 400             | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 1,451,736 | 718,521         | 569,246                                     | -                                 | 114,000                    | 37,929                             | 9,370                          | 1,300                                    | 120                   | 1,250 |         |
| NATIONAL SCIENCE FOUNDATION.....        | 820,850   | 96,556          | 18,014                                      | 517                               | 601,408                    | 55,832                             | 37,311                         | 606                                      | 5,100                 | 5,506 |         |
| NUCLEAR REGULATORY COMMISSION.....      | 159,030   | 12,147          | 7,020                                       | 99,645                            | 5,585                      | 20,055                             | 2,695                          | 6,448                                    | 413                   | 1,022 |         |
| SMALL BUSINESS ADMINISTRATION.....      | 55        | 51              | 50                                          | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| SMITHSONIAN INSTITUTION.....            | 33,969    | 30,960          | -                                           | -                                 | 2,291                      | -                                  | 718                            | -                                        | -                     | -     |         |
| TENNESSEE VALLEY AUTHORITY.....         | 46,015    | 22,045          | -                                           | -                                 | 212                        | -                                  | 23,758                         | -                                        | -                     | -     |         |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,931     | 170             | 1,491                                       | -                                 | 340                        | 120                                | 600                            | 110                                      | -                     | 100   |         |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,666     | 2,666           | -                                           | -                                 | -                          | -                                  | -                              | -                                        | -                     | -     |         |
| VETERANS ADMINISTRATION.....            | 100,657   | 98,182          | 882                                         | -                                 | 933                        | -                                  | 539                            | -                                        | 121                   | -     |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-13. FEDERAL OBLIGATIONS FOR RESEARCH, BY DETAILED FIELD OF SCIENCE:  
FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| FIELD OF SCIENCE                            | ACTUAL, 1977 | ESTIMATES |            |
|---------------------------------------------|--------------|-----------|------------|
|                                             |              | 1978      | 1979       |
| TOTAL, ALL FIELDS.....                      | 8,841,215    | 9,857,531 | 10,482,667 |
| LIFE SCIENCES, TOTAL.....                   | 3,019,384    | 3,382,927 | 3,506,920  |
| BIOLOGICAL.....                             | 1,509,321    | 1,693,973 | 1,785,018  |
| CLINICAL MEDICAL.....                       | 871,517      | 971,480   | 974,061    |
| OTHER MEDICAL SCIENCES.....                 | 538,045      | 606,537   | 630,966    |
| LIFE SCIENCES, NEC.....                     | 100,501      | 110,937   | 116,875    |
| PSYCHOLOGY, TOTAL.....                      | 159,119      | 177,882   | 200,272    |
| BIOLOGICAL ASPECTS.....                     | 57,804       | 63,266    | 71,003     |
| SOCIAL ASPECTS.....                         | 76,838       | 85,623    | 97,686     |
| PSYCHOLOGICAL SCIENCES, NEC.....            | 24,477       | 28,993    | 31,583     |
| PHYSICAL SCIENCES, TOTAL.....               | 1,510,570    | 1,695,904 | 1,818,728  |
| ASTRONOMY.....                              | 199,068      | 239,565   | 276,624    |
| CHEMISTRY.....                              | 411,204      | 464,692   | 499,784    |
| PHYSICS.....                                | 841,463      | 916,679   | 944,826    |
| PHYSICAL SCIENCES, NEC.....                 | 58,835       | 74,968    | 97,494     |
| ENVIRONMENTAL SCIENCES, TOTAL.....          | 921,040      | 1,011,778 | 1,109,503  |
| ATMOSPHERIC SCIENCES.....                   | 324,828      | 329,053   | 372,329    |
| GEOLOGICAL SCIENCES.....                    | 276,846      | 334,764   | 362,586    |
| OCEANOGRAPHY.....                           | 197,394      | 206,343   | 224,956    |
| ENVIRONMENTAL SCIENCES, NEC.....            | 121,972      | 141,618   | 149,632    |
| MATHEMATICS & COMPUTER SCIENCES, TOTAL..... | 176,337      | 197,932   | 230,349    |
| MATHEMATICS.....                            | 93,241       | 100,852   | 112,536    |
| COMPUTER SCIENCES.....                      | 78,472       | 88,765    | 104,636    |
| MATHEMATICS & COMPUTER SCIENCES, NEC.....   | 4,624        | 8,315     | 13,177     |
| ENGINEERING, TOTAL.....                     | 2,425,912    | 2,664,995 | 2,791,251  |
| AERONAUTICAL.....                           | 667,283      | 728,113   | 774,994    |
| ASTRONAUTICAL.....                          | 229,478      | 235,528   | 246,159    |
| CHEMICAL.....                               | 106,675      | 116,896   | 105,591    |
| CIVIL.....                                  | 125,565      | 133,037   | 136,021    |
| ELECTRICAL.....                             | 319,401      | 370,901   | 414,043    |
| MECHANICAL.....                             | 177,692      | 172,754   | 177,968    |
| METALLURGY & MATERIALS.....                 | 314,261      | 340,325   | 382,112    |
| ENGINEERING, NEC.....                       | 485,557      | 567,421   | 614,363    |
| SOCIAL SCIENCES, TOTAL.....                 | 443,342      | 530,038   | 556,908    |
| ANTHROPOLOGY.....                           | 12,379       | 16,550    | 17,555     |
| ECONOMICS.....                              | 143,394      | 170,919   | 176,258    |
| POLITICAL SCIENCE.....                      | 8,479        | 11,076    | 11,585     |
| SOCIOLOGY.....                              | 52,169       | 81,419    | 78,351     |
| SOCIAL SCIENCES, NEC.....                   | 226,921      | 250,074   | 273,159    |
| OTHER SCIENCES, NEC.....                    | 185,511      | 196,075   | 268,736    |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-14. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL     | LIFE SCIENCES | PSY-<br>CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER SCIENCES | ENGI-<br>NEERING | SOCIAL SCIENCES | OTHER SCIENCES<br>NEC |
|-----------------------------------------|-----------|---------------|-----------------|-------------------|-----------------------------|------------------------------------------------|------------------|-----------------|-----------------------|
| TOTAL, ALL AGENCIES.....                | 8,841,215 | 3,019,384     | 159,119         | 1,510,570         | 921,040                     | 176,337                                        | 2,425,912        | 443,342         | 185,511               |
| DEPARTMENTS                             |           |               |                 |                   |                             |                                                |                  |                 |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....   | 524,020   | 334,176       | 85              | 63,434            | 14,104                      | 3,845                                          | 44,190           | 64,186          | -                     |
| ECON, STAT & COOPERATIVES SERVICE....   | 29,667    | -             | -               | -                 | -                           | 1,438                                          | -                | 28,229          | -                     |
| FOREST SERVICE.....                     | 86,110    | 53,863        | 85              | 4,818             | 9,716                       | 1,316                                          | 10,519           | 5,793           | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION    | 408,243   | 280,313       | -               | 58,616            | 4,388                       | 1,091                                          | 33,671           | 30,164          | -                     |
| COOPERATIVE RESEARCH.....               | 147,265   | 87,448        | -               | 6,363             | 796                         | -                                              | 4,363            | 28,295          | -                     |
| FEDERAL RESEARCH.....                   | 280,978   | 192,865       | -               | 52,253            | 3,592                       | 1,091                                          | 29,308           | 1,869           | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....      | 176,129   | 49,950        | 203             | 27,799            | 61,652                      | 4,903                                          | 23,852           | 7,026           | 744                   |
| BUREAU OF THE CENSUS.....               | 2,008     | -             | 196             | -                 | -                           | 1,293                                          | -                | 475             | 44                    |
| ECONOMIC DEVELOPMENT ADMINISTRATION..   | 2,500     | -             | -               | -                 | -                           | -                                              | -                | 2,500           | -                     |
| MARITIME ADMINISTRATION.....            | 3,700     | -             | -               | -                 | -                           | -                                              | 3,537            | 163             | -                     |
| NATIONAL BUREAU OF STANDARDS.....       | 44,954    | -             | -               | 24,703            | 106                         | 3,507                                          | 16,638           | -               | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN....  | 4,476     | 160           | 7               | 2,524             | -                           | 103                                            | 1,682            | -               | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....   | 115,776   | 49,790        | -               | 572               | 61,546                      | -                                              | 795              | 3,073           | -                     |
| NAT'L TELECOMMUN & INFO ADMIN.....      | 2,000     | -             | -               | -                 | -                           | -                                              | 1,200            | 100             | 700                   |
| OFFICE OF MINORITY BUSINESS ENTERP....  | 715       | -             | -               | -                 | -                           | -                                              | -                | 715             | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....       | 2,041,397 | 147,576       | 57,025          | 289,332           | 125,852                     | 76,197                                         | 1,240,773        | 25,584          | 79,058                |
| DEPARTMENT OF THE ARMY.....             | 433,415   | 85,627        | 20,707          | 82,911            | 10,512                      | 9,430                                          | 199,189          | 22,793          | 2,246                 |
| DEPARTMENT OF THE NAVY.....             | 377,967   | 20,549        | 10,624          | 95,250            | 59,406                      | 31,460                                         | 159,425          | 1,253           | -                     |
| DEPARTMENT OF THE AIR FORCE.....        | 835,300   | 35,562        | 18,556          | 30,920            | 31,862                      | 8,518                                          | 709,862          | -               | -                     |
| DEFENSE AGENCIES.....                   | 393,415   | 5,650         | 6,928           | 80,097            | 24,072                      | 26,632                                         | 172,034          | 1,263           | 76,739                |
| DEPARTMENTWIDE FUNDS.....               | 1,300     | 188           | 210             | 154               | -                           | 157                                            | 243              | 275             | 73                    |
| DEPARTMENT OF ENERGY.....               | 891,266   | 114,863       | -               | 552,766           | 84,765                      | 6,839                                          | 119,347          | 2,686           | 10,300                |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL  | 2,433,722 | 2,004,215     | 66,301          | 54,002            | -                           | 8,372                                          | 37,054           | 187,265         | 76,513                |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..   | 151,966   | 76,950        | 46,563          | 938               | -                           | 1,936                                          | -                | 20,827          | 4,752                 |
| CENTER FOR DISEASE CONTROL.....         | 55,273    | 55,273        | -               | -                 | -                           | -                                              | -                | -               | -                     |
| FOOD AND DRUG ADMINISTRATION.....       | 42,872    | 42,872        | -               | -                 | -                           | -                                              | -                | -               | -                     |
| HEALTH CARE FINANCING ADMINISTRATION..  | 29,998    | -             | -               | -                 | -                           | -                                              | -                | 29,998          | -                     |
| HEALTH RESOURCES ADMINISTRATION.....    | 7,410     | -             | -               | -                 | -                           | -                                              | -                | 7,410           | -                     |
| HEALTH SERVICES ADMINISTRATION.....     | 9,521     | 9,521         | -               | -                 | -                           | -                                              | -                | -               | -                     |
| HUMAN DEVELOPMENT SERVICES.....         | 48,711    | 16,809        | 1,454           | -                 | -                           | 183                                            | 6,489            | 23,776          | -                     |
| NATIONAL INSTITUTE OF EDUCATION.....    | 27,120    | -             | -               | -                 | -                           | -                                              | -                | 27,120          | -                     |
| NATIONAL INSTITUTES OF HEALTH.....      | 1,988,100 | 1,802,790     | 18,286          | 53,064            | -                           | 6,253                                          | 30,565           | 6,871           | 70,273                |
| OFFICE OF EDUCATION.....                | 11,892    | -             | -               | -                 | -                           | -                                              | -                | 11,892          | -                     |
| OFFICE OF ASS'T SCTY FOR EDUCATION..... | 1,037     | -             | -               | -                 | -                           | -                                              | -                | 1,037           | -                     |
| OFFICE OF ASS'T SCTY FOR HEALTH.....    | 28,005    | -             | -               | -                 | -                           | -                                              | -                | 27,117          | 1,468                 |
| OFFICE OF THE SECRETARY.....            | 40,000    | -             | -               | -                 | -                           | -                                              | -                | 20,000          | -                     |
| SOCIAL SECURITY ADMINISTRATION.....     | 11,217    | -             | -               | -                 | -                           | -                                              | -                | 11,217          | -                     |
| DEPT OF HOUSING & URBAN DEVELOPMENT.... | 32,720    | -             | -               | -                 | -                           | -                                              | 3,775            | 28,945          | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....  | 237,513   | 28,789        | 320             | 13,820            | 129,499                     | 3,367                                          | 56,022           | 4,926           | 770                   |
| BUREAU OF LAND MANAGEMENT.....          | 819       | 767           | -               | -                 | -                           | -                                              | -                | 52              | -                     |
| BUREAU OF MINES.....                    | 52,322    | -             | -               | 3,680             | 2,870                       | 1,650                                          | 44,022           | 100             | -                     |
| BUREAU OF RECLAMATION.....              | 9,282     | 500           | -               | -                 | 6,523                       | -                                              | 1,965            | 284             | 10                    |
| GEOLOGICAL SURVEY.....                  | 128,928   | -             | -               | 9,448             | 115,595                     | 1,610                                          | 2,275            | -               | -                     |
| HERITAGE CONSERVATION & REC SERVICE..   | 20        | -             | -               | -                 | -                           | -                                              | -                | 20              | -                     |
| NATIONAL PARK SERVICE.....              | 7,498     | 3,830         | -               | 27                | 502                         | -                                              | -                | 2,897           | 242                   |
| OFFICE OF THE SECRETARY.....            | 4,536     | -             | -               | -                 | 1,056                       | -                                              | 3,480            | -               | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY....  | 12,308    | 1,892         | 320             | 665               | 2,953                       | 107                                            | 4,280            | 1,573           | 518                   |
| US FISH AND WILDLIFE SERVICE.....       | 21,800    | 21,800        | -               | -                 | -                           | -                                              | -                | -               | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....       | 17,584    | 172           | 1,149           | -                 | -                           | -                                              | 1,048            | 15,215          | -                     |
| BUREAU OF PRISONS.....                  | 136       | -             | -               | -                 | -                           | -                                              | -                | 136             | -                     |
| DRUG ENFORCEMENT ADMINISTRATION.....    | 900       | -             | -               | -                 | -                           | -                                              | 900              | -               | -                     |
| IMMIGRATION & NATURALIZATION SERVICE    | 148       | -             | -               | -                 | -                           | -                                              | 148              | -               | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....   | 16,400    | 172           | 1,149           | -                 | -                           | -                                              | -                | 15,079          | -                     |
| DEPARTMENT OF LABOR, TOTAL.....         | 18,727    | -             | 272             | -                 | -                           | -                                              | -                | 18,455          | -                     |
| BUREAU OF LABOR STATISTICS.....         | 896       | -             | -               | -                 | -                           | -                                              | -                | 896             | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....      | 6,393     | -             | 272             | -                 | -                           | -                                              | -                | 6,121           | -                     |
| EMPLOYMENT STANDARDS ADMINISTRATION..   | 4,446     | -             | -               | -                 | -                           | -                                              | -                | 4,446           | -                     |
| LABOR-MANAGEMENT SERVICES ADMIN.....    | 3,306     | -             | -               | -                 | -                           | -                                              | -                | 3,306           | -                     |
| OCCUPATIONAL SAFETY & HEALTH ADMIN....  | 3,441     | -             | -               | -                 | -                           | -                                              | -                | 3,441           | -                     |
| OFFICE OF THE SECRETARY.....            | 245       | -             | -               | -                 | -                           | -                                              | -                | 245             | -                     |
| DEPARTMENT OF STATE, TOTAL.....         | 38,270    | 22,661        | -               | -                 | 7,161                       | -                                              | -                | 8,448           | -                     |
| DEPARTMENTAL FUNDS.....                 | 2,065     | 171           | -               | -                 | 171                         | -                                              | -                | 1,723           | -                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT    | 36,205    | 22,490        | -               | -                 | 6,990                       | -                                              | -                | 6,725           | -                     |

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TABLE C-14. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL     | LIFE<br>SCIENCES | PSY-<br>CHOLOGY | PHYSICAL<br>SCIENCES | ENVIRON-<br>MENTAL<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|-----------------------------------------|-----------|------------------|-----------------|----------------------|--------------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| DEPT OF TRANSPORTATION, TOTAL.....      | 51,760    | 2,135            | 66              | -                    | 420                            | 1,327                                             | 46,870           | 942                | -                        |
| FEDERAL AVIATION ADMINISTRATION.....    | 4,700     | -                | -               | -                    | -                              | -                                                 | 4,700            | -                  | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,300     | -                | -               | -                    | -                              | -                                                 | 5,300            | -                  | -                        |
| FEDERAL RAILROAD ADMINISTRATION.....    | 6,600     | -                | -               | -                    | -                              | 25                                                | 6,568            | 7                  | -                        |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN....  | 27,500    | 2,135            | -               | -                    | -                              | 1,302                                             | 23,839           | 224                | -                        |
| OFFICE OF THE SECRETARY.....            | 4,160     | -                | 66              | -                    | 13                             | -                                                 | 3,402            | 679                | -                        |
| US COAST GUARD.....                     | 2,500     | -                | -               | -                    | 407                            | -                                                 | 2,061            | 32                 | -                        |
| URBAN MASS. TRANSPORTATION ADMIN....    | 1,000     | -                | -               | -                    | -                              | -                                                 | 1,000            | -                  | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,140     | -                | -               | 1,236                | -                              | -                                                 | 544              | -                  | 360                      |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 440       | -                | -               | 80                   | -                              | -                                                 | -                | -                  | 360                      |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,700     | -                | -               | 1,156                | -                              | -                                                 | 544              | -                  | -                        |
| OTHER AGENCIES                          |           |                  |                 |                      |                                |                                                   |                  |                    |                          |
| ACTION.....                             | 100       | -                | -               | -                    | -                              | -                                                 | -                | 100                | -                        |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,526     | -                | -               | -                    | -                              | -                                                 | -                | 1,526              | -                        |
| APPALACHIAN REGIONAL COMMISSION.....    | 562       | -                | -               | -                    | -                              | -                                                 | -                | 562                | -                        |
| CIVIL AERONAUTICS BOARD.....            | 535       | -                | -               | -                    | -                              | -                                                 | -                | 535                | -                        |
| CIVIL SERVICE COMMISSION.....           | 1,085     | -                | 1,085           | -                    | -                              | -                                                 | -                | -                  | -                        |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000     | -                | -               | -                    | -                              | -                                                 | -                | 1,000              | -                        |
| CONSUMER PRODUCT SAFETY COMMISSION....  | 3,710     | 1,423            | -               | -                    | -                              | -                                                 | 2,030            | 257                | -                        |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 205,252   | 76,762           | -               | 50,155               | 6,205                          | 3,100                                             | 65,715           | 3,315              | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,043     | -                | -               | -                    | -                              | 60                                                | 1,053            | 930                | -                        |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,665     | -                | -               | -                    | -                              | -                                                 | -                | 1,665              | -                        |
| FEDERAL TRADE COMMISSION.....           | 1,111     | -                | -               | -                    | -                              | -                                                 | -                | 1,111              | -                        |
| GENERAL SERVICES ADMINISTRATION.....    | 386       | -                | -               | -                    | -                              | -                                                 | 298              | 50                 | 38                       |
| INTERNATIONAL COMMUNICATION AGENCY..... | 71        | -                | -               | -                    | -                              | -                                                 | 71               | -                  | -                        |
| INTERSTATE COMMERCE COMMISSION.....     | 64        | -                | -               | -                    | -                              | 42                                                | -                | 22                 | -                        |
| LIBRARY OF CONGRESS.....                | 400       | -                | -               | -                    | -                              | -                                                 | -                | -                  | 400                      |
| NATIONAL AERONAUTICS & SPACE ADMIN....  | 1,206,076 | 29,056           | 11,651          | 264,156              | 305,592                        | 25,917                                            | 566,123          | 615                | 2,966                    |
| NATIONAL SCIENCE FOUNDATION.....        | 688,300   | 113,322          | 11,381          | 184,160              | 182,360                        | 42,264                                            | 86,135           | 54,016             | 14,662                   |
| NUCLEAR REGULATORY COMMISSION.....      | 112,291   | -                | -               | -                    | -                              | -                                                 | 112,291          | -                  | -                        |
| SMALL BUSINESS ADMINISTRATION.....      | 466       | -                | -               | -                    | -                              | -                                                 | -                | 466                | -                        |
| SMITHSONIAN INSTITUTION.....            | 29,651    | 12,554           | -               | 5,007                | 2,383                          | -                                                 | -                | 9,707              | -                        |
| TENNESSEE VALLEY AUTHORITY.....         | 22,886    | 2,346            | -               | 4,384                | 887                            | -                                                 | 15,269           | -                  | -                        |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 1,796     | -                | -               | 319                  | 160                            | 104                                               | 75               | 1,138              | -                        |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,649     | -                | -               | -                    | -                              | -                                                 | -                | 2,649              | -                        |
| VETERANS ADMINISTRATION.....            | 92,342    | 79,384           | 9,581           | -                    | -                              | -                                                 | 3,377            | -                  | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-15. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | LIFE SCIENCES | PSY-<br>CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL SCIENCES | OTHER SCIENCES<br>NEC |
|----------------------------------------|-----------|---------------|-----------------|-------------------|-----------------------------|---------------------------------------------------|------------------|-----------------|-----------------------|
| TOTAL, ALL AGENCIES.....               | 9,857,531 | 3,382,927     | 177,882         | 1,695,904         | 1,011,778                   | 197,932                                           | 2,664,995        | 530,038         | 196,075               |
| DEPARTMENTS                            |           |               |                 |                   |                             |                                                   |                  |                 |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 606,536   | 393,509       | 101             | 69,314            | 16,399                      | 4,282                                             | 49,820           | 73,111          | -                     |
| ECON, STAT & COOPERATIVES SERVICE...   | 33,899    | -             | -               | -                 | -                           | 1,507                                             | -                | 32,392          | -                     |
| FOREST SERVICE.....                    | 101,485   | 63,260        | 101             | 5,711             | 11,517                      | 1,560                                             | 12,468           | 6,868           | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION   | 471,152   | 330,249       | -               | 63,603            | 4,882                       | 1,215                                             | 37,352           | 33,851          | -                     |
| COOPERATIVE RESEARCH.....              | 157,674   | 112,964       | -               | 7,134             | 891                         | -                                                 | 4,876            | 31,809          | -                     |
| FEDERAL RESEARCH.....                  | 313,478   | 217,285       | -               | 56,469            | 3,991                       | 1,215                                             | 32,476           | 2,042           | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 193,250   | 56,272        | 229             | 29,536            | 65,753                      | 5,399                                             | 24,021           | 11,096          | 944                   |
| BUREAU OF THE CENSUS.....              | 2,182     | -             | 221             | -                 | -                           | 1,438                                             | -                | 479             | 44                    |
| ECONOMIC DEVELOPMENT ADMINISTRATION... | 5,500     | -             | -               | -                 | -                           | -                                                 | -                | 5,500           | -                     |
| MARITIME ADMINISTRATION.....           | 4,400     | -             | -               | -                 | -                           | -                                                 | 4,110            | 290             | -                     |
| NATIONAL BUREAU OF STANDARDS.....      | 46,908    | -             | -               | 26,348            | 116                         | 3,850                                             | 16,594           | -               | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN...  | 4,690     | 177           | 8               | 2,619             | -                           | 111                                               | 1,775            | -               | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 126,870   | 56,095        | -               | 569               | 65,637                      | -                                                 | 642              | 3,927           | -                     |
| NAT'L TELECOMM & INFO ADMIN.....       | 1,800     | -             | -               | -                 | -                           | -                                                 | 900              | -               | 900                   |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 900       | -             | -               | -                 | -                           | -                                                 | -                | 900             | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 2,143,359 | 152,296       | 62,009          | 304,613           | 135,032                     | 88,747                                            | 1,299,464        | 24,928          | 76,270                |
| DEPARTMENT OF THE ARMY.....            | 439,444   | 85,609        | 22,210          | 96,838            | 12,728                      | 14,414                                            | 184,087          | 20,719          | 2,839                 |
| DEPARTMENT OF THE NAVY.....            | 402,756   | 22,014        | 11,644          | 100,940           | 64,359                      | 32,144                                            | 170,317          | 1,338           | -                     |
| DEPARTMENT OF THE AIR FORCE.....       | 865,700   | 37,268        | 19,962          | 32,270            | 33,605                      | 9,160                                             | 733,435          | -               | -                     |
| DEFENSE AGENCIES.....                  | 428,559   | 6,439         | 7,089           | 73,737            | 24,340                      | 32,201                                            | 210,314          | 1,422           | 73,017                |
| DEPARTMENTWIDE FUNDS.....              | 6,900     | 966           | 1,104           | 828               | -                           | 828                                               | 1,311            | 1,449           | 414                   |
| DEPARTMENT OF ENERGY.....              | 1,005,170 | 122,471       | -               | 629,501           | 97,520                      | 7,969                                             | 135,967          | 2,575           | 9,187                 |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 2,750,256 | 2,256,801     | 72,339          | 61,134            | -                           | 9,231                                             | 41,551           | 220,419         | 88,781                |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH... | 162,364   | 81,759        | 50,051          | 970               | -                           | 1,956                                             | -                | 22,343          | 5,285                 |
| CENTER FOR DISEASE CONTROL.....        | 62,664    | 62,664        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| FOOD AND DRUG ADMINISTRATION.....      | 48,600    | 48,600        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| HEALTH CARE FINANCING ADMINISTRATION   | 35,065    | -             | -               | -                 | -                           | -                                                 | -                | 35,065          | -                     |
| HEALTH RESOURCES ADMINISTRATION.....   | 5,000     | -             | -               | -                 | -                           | -                                                 | -                | 5,000           | -                     |
| HEALTH SERVICES ADMINISTRATION.....    | 9,786     | 9,786         | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| HUMAN DEVELOPMENT SERVICES.....        | 49,847    | 17,361        | 1,586           | -                 | -                           | 200                                               | 7,078            | 23,622          | -                     |
| NATIONAL INSTITUTE OF EDUCATION.....   | 37,000    | -             | -               | -                 | -                           | -                                                 | -                | 37,000          | -                     |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,245,900 | 2,036,631     | 20,702          | 60,164            | -                           | 7,075                                             | 34,473           | 7,747           | 79,108                |
| OFFICE OF EDUCATION.....               | 14,255    | -             | -               | -                 | -                           | -                                                 | -                | 14,255          | -                     |
| OFFICE OF ASS'T SCTY FOR EDUCATION...  | 1,042     | -             | -               | -                 | -                           | -                                                 | -                | 1,042           | -                     |
| OFFICE OF ASS'T SCTY FOR HEALTH.....   | 35,681    | -             | -               | -                 | -                           | -                                                 | -                | 31,293          | 4,388                 |
| OFFICE OF THE SECRETARY.....           | 30,000    | -             | -               | -                 | -                           | -                                                 | -                | 30,000          | -                     |
| SOCIAL SECURITY ADMINISTRATION.....    | 13,052    | -             | -               | -                 | -                           | -                                                 | -                | 13,052          | -                     |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 38,100    | -             | -               | -                 | -                           | -                                                 | 4,796            | 33,304          | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 295,945   | 32,409        | 350             | 16,864            | 172,333                     | 4,730                                             | 61,764           | 6,220           | 1,275                 |
| BUREAU OF LAND MANAGEMENT.....         | 1,078     | 1,046         | -               | -                 | -                           | -                                                 | -                | 32              | -                     |
| BUREAU OF MINES.....                   | 60,065    | -             | -               | 4,400             | 3,850                       | 2,350                                             | 49,350           | 115             | -                     |
| BUREAU OF RECLAMATION.....             | 10,923    | 404           | -               | -                 | 8,181                       | -                                                 | 2,062            | 221             | 55                    |
| GEOLOGICAL SURVEY.....                 | 162,565   | -             | -               | 11,620            | 145,757                     | 2,244                                             | 2,944            | -               | -                     |
| NATIONAL PARK SERVICE.....             | 9,500     | 4,724         | -               | 34                | 635                         | -                                                 | -                | 3,787           | 320                   |
| OFF OF SURF MINING RECLAM & ENFORCE... | 7,800     | -             | -               | -                 | 7,800                       | -                                                 | -                | -               | -                     |
| OFFICE OF THE SECRETARY.....           | 3,299     | -             | -               | -                 | 1,855                       | 11                                                | 1,433            | -               | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 17,515    | 3,035         | 350             | 810               | 4,255                       | 125                                               | 5,975            | 2,065           | 900                   |
| US FISH AND WILDLIFE SERVICE.....      | 23,200    | 23,200        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 47,750    | 607           | 4,525           | -                 | -                           | 75                                                | 2,747            | 39,796          | -                     |
| BUREAU OF PRISONS.....                 | 746       | -             | -               | -                 | -                           | -                                                 | -                | 746             | -                     |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 2,300     | -             | 300             | -                 | -                           | -                                                 | 2,000            | -               | -                     |
| IMMIGRATION & NATURALIZATION SERVICE   | 304       | -             | -               | -                 | -                           | -                                                 | 304              | -               | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 42,400    | 607           | 4,225           | -                 | -                           | 75                                                | 443              | 37,050          | -                     |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2,000     | -             | -               | -                 | -                           | -                                                 | -                | 2,000           | -                     |
| DEPARTMENT OF LABOR, TOTAL.....        | 19,716    | -             | 292             | -                 | -                           | -                                                 | -                | 19,424          | -                     |
| BUREAU OF LABOR STATISTICS.....        | 742       | -             | -               | -                 | -                           | -                                                 | -                | 742             | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,622     | -             | 292             | -                 | -                           | -                                                 | -                | 5,330           | -                     |
| EMPLOYMENT STANDARDS ADMINISTRATION... | 5,583     | -             | -               | -                 | -                           | -                                                 | -                | 5,583           | -                     |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 3,025     | -             | -               | -                 | -                           | -                                                 | -                | 3,025           | -                     |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | 4,499     | -             | -               | -                 | -                           | -                                                 | -                | 4,499           | -                     |
| OFFICE OF THE SECRETARY.....           | 245       | -             | -               | -                 | -                           | -                                                 | -                | 245             | -                     |
| DEPARTMENT OF STATE, TOTAL.....        | 35,835    | 14,854        | -               | -                 | 1,972                       | -                                                 | 550              | 18,459          | -                     |
| DEPARTMENTAL FUNDS.....                | 2,427     | 3             | -               | -                 | 224                         | -                                                 | -                | 2,200           | -                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 33,408    | 14,851        | -               | -                 | 1,748                       | -                                                 | 550              | 16,259          | -                     |

CONTINUED ON NEXT PAGE

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TABLE C-15. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL     | LIFE<br>SCIENCES | PSY-<br>CHOLOGY | PHYSICAL<br>SCIENCES | ENVIRON-<br>MENTAL<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|-----------------------------------------|-----------|------------------|-----------------|----------------------|--------------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| DEPT OF TRANSPORTATION, TOTAL.....      | 57,800    | 2,235            | 87              | -                    | 213                            | 1,394                                             | 52,715           | 1,156              | -                        |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,700     | -                | -               | -                    | -                              | -                                                 | 7,700            | -                  | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,200     | -                | -               | -                    | -                              | -                                                 | 5,200            | -                  | -                        |
| FEDERAL RAILROAD ADMINISTRATION.....    | 8,300     | -                | -               | -                    | -                              | 31                                                | 8,269            | 7                  | -                        |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 28,800    | 2,235            | -               | -                    | -                              | 1,363                                             | 24,966           | 236                | -                        |
| OFFICE OF THE SECRETARY.....            | 5,500     | -                | 87              | -                    | 18                             | -                                                 | 4,498            | 897                | -                        |
| US COAST GUARD.....                     | 1,200     | -                | -               | -                    | 195                            | -                                                 | 989              | 16                 | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,100     | -                | -               | -                    | -                              | -                                                 | 1,100            | -                  | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,292     | -                | -               | 1,304                | -                              | -                                                 | 976              | -                  | 412                      |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 492       | -                | -               | 80                   | -                              | -                                                 | -                | -                  | 412                      |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,800     | -                | -               | 1,224                | -                              | -                                                 | 576              | -                  | -                        |
| OTHER AGENCIES                          |           |                  |                 |                      |                                |                                                   |                  |                    |                          |
| ACTION.....                             | 466       | -                | -               | -                    | -                              | -                                                 | -                | 466                | -                        |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,659     | -                | -               | -                    | -                              | -                                                 | -                | 1,659              | -                        |
| APPALACHIAN REGIONAL COMMISSION.....    | 600       | -                | -               | -                    | -                              | -                                                 | -                | 600                | -                        |
| CIVIL AERONAUTICS BOARD.....            | 734       | -                | -               | -                    | -                              | -                                                 | -                | 734                | -                        |
| CIVIL SERVICE COMMISSION.....           | 1,127     | -                | 1,127           | -                    | -                              | -                                                 | -                | -                  | -                        |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000     | -                | -               | -                    | -                              | -                                                 | -                | 1,000              | -                        |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 1,763     | 1,033            | -               | -                    | -                              | -                                                 | 437              | 293                | -                        |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 237,800   | 87,986           | -               | 62,984               | 7,134                          | 3,091                                             | 73,005           | 3,600              | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,959     | -                | -               | -                    | -                              | 102                                               | 1,363            | 1,494              | -                        |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,113     | -                | -               | -                    | -                              | -                                                 | -                | 1,113              | -                        |
| FEDERAL TRADE COMMISSION.....           | 1,335     | -                | -               | -                    | -                              | -                                                 | -                | 1,335              | -                        |
| GENERAL SERVICES ADMINISTRATION.....    | 1,741     | -                | -               | -                    | -                              | -                                                 | 1,627            | 59                 | 55                       |
| INTERNATIONAL COMMUNICATION AGENCY..... | 141       | -                | -               | -                    | -                              | -                                                 | 141              | -                  | -                        |
| INTERSTATE COMMERCE COMMISSION.....     | 216       | -                | -               | -                    | -                              | 50                                                | -                | 166                | -                        |
| LIBRARY OF CONGRESS.....                | 400       | -                | -               | -                    | -                              | -                                                 | -                | -                  | 400                      |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 1,359,509 | 36,268           | 13,120          | 312,860              | 308,299                        | 28,760                                            | 656,749          | 603                | 1,850                    |
| NATIONAL SCIENCE FOUNDATION.....        | 748,327   | 123,728          | 13,189          | 196,601              | 203,319                        | 43,906                                            | 99,333           | 51,409             | 16,842                   |
| NUCLEAR REGULATORY COMMISSION.....      | 132,139   | -                | -               | -                    | -                              | -                                                 | 132,139          | -                  | -                        |
| SMITHSONIAN INSTITUTION.....            | 32,553    | 12,703           | -               | 5,983                | 2,540                          | -                                                 | -                | 11,327             | -                        |
| TENNESSEE VALLEY AUTHORITY.....         | 30,821    | 2,637            | -               | 4,937                | 916                            | -                                                 | 22,272           | -                  | 59                       |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,145     | -                | -               | 273                  | 348                            | 196                                               | 258              | 1,070              | -                        |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,622     | -                | -               | -                    | -                              | -                                                 | -                | 2,622              | -                        |
| VETERANS ADMINISTRATION.....            | 101,352   | 87,118           | 10,514          | -                    | -                              | -                                                 | 3,720            | -                  | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-16. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL      | LIFE SCIENCES | PSY-<br>CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL SCIENCES | OTHER SCIENCES<br>NEC |
|----------------------------------------|------------|---------------|-----------------|-------------------|-----------------------------|---------------------------------------------------|------------------|-----------------|-----------------------|
| TOTAL, ALL AGENCIES.....               | 10,482,667 | 13,506,920    | 200,272         | 1,818,728         | 1,109,503                   | 230,349                                           | 2,791,251        | 556,908         | 268,736               |
| DEPARTMENTS                            |            |               |                 |                   |                             |                                                   |                  |                 |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 611,467    | 400,063       | 98              | 71,541            | 15,997                      | 4,234                                             | 49,074           | 70,460          | -                     |
| ECON. STAT & COOPERATIVES SERVICE....  | 34,899     | -             | -               | -                 | -                           | 1,507                                             | -                | 33,392          | -                     |
| FOREST SERVICE.....                    | 98,018     | 61,100        | 98              | 5,517             | 11,123                      | 1,507                                             | 12,040           | 6,633           | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION   | 478,550    | 338,963       | -               | 66,024            | 4,874                       | 1,220                                             | 37,034           | 30,435          | -                     |
| COOPERATIVE RESEARCH.....              | 157,599    | 117,678       | -               | 6,380             | 798                         | -                                                 | 4,374            | 26,369          | -                     |
| FEDERAL RESEARCH.....                  | 320,951    | 221,285       | -               | 59,644            | 4,076                       | 1,220                                             | 32,660           | 2,066           | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 220,082    | 60,661        | 288             | 29,657            | 77,805                      | 13,586                                            | 25,027           | 11,805          | 1,253                 |
| BUREAU OF THE CENSUS.....              | 2,680      | -             | 278             | -                 | -                           | 1,775                                             | -                | 574             | 53                    |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 5,500      | -             | -               | -                 | -                           | -                                                 | -                | 5,500           | -                     |
| MARITIME ADMINISTRATION.....           | 3,700      | -             | -               | -                 | -                           | -                                                 | 3,450            | 250             | -                     |
| NATIONAL BUREAU OF STANDARDS.....      | 56,134     | -             | -               | 26,649            | 136                         | 11,674                                            | 17,675           | -               | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 4,798      | 177           | 10              | 2,412             | -                           | 137                                               | 2,062            | -               | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 143,970    | 60,484        | -               | 596               | 77,669                      | -                                                 | 740              | 4,481           | -                     |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 2,300      | -             | -               | -                 | -                           | -                                                 | 1,100            | -               | 1,200                 |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 1,000      | -             | -               | -                 | -                           | -                                                 | -                | 1,000           | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 2,319,507  | 157,188       | 68,669          | 338,891           | 152,381                     | 100,821                                           | 1,343,529        | 29,941          | 128,087               |
| DEPARTMENT OF THE ARMY.....            | 476,312    | 87,920        | 27,798          | 97,279            | 14,069                      | 13,700                                            | 203,119          | 25,706          | 6,725                 |
| DEPARTMENT OF THE NAVY.....            | 445,454    | 23,918        | 13,337          | 107,832           | 73,619                      | 38,268                                            | 186,824          | 1,834           | -                     |
| DEPARTMENT OF THE AIR FORCE.....       | 885,400    | 38,456        | 20,183          | 34,368            | 35,091                      | 10,063                                            | 747,239          | -               | -                     |
| DEFENSE AGENCIES.....                  | 507,141    | 6,166         | 6,519           | 98,768            | 29,602                      | 38,166                                            | 205,361          | 1,509           | 121,050               |
| DEPARTMENTWIDE FUNDS.....              | 5,200      | 728           | 832             | 624               | -                           | 624                                               | 988              | 1,092           | 312                   |
| DEPARTMENT OF ENERGY.....              | 1,074,363  | 114,117       | -               | 652,282           | 100,419                     | 12,810                                            | 162,718          | 3,500           | 28,517                |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 2,885,845  | 2,356,818     | 85,653          | 65,421            | -                           | 9,841                                             | 42,254           | 236,179         | 89,683                |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 201,411    | 101,223       | 62,043          | 618               | -                           | 2,197                                             | -                | 27,827          | 7,503                 |
| CENTER FOR DISEASE CONTROL.....        | 63,075     | 63,075        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| FOOD AND DRUG ADMINISTRATION.....      | 49,147     | 49,147        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| HEALTH CARE FINANCING ADMINISTRATION   | 38,552     | -             | -               | -                 | -                           | -                                                 | -                | 38,552          | -                     |
| HEALTH SERVICES ADMINISTRATION.....    | 10,020     | 10,020        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| HUMAN DEVELOPMENT SERVICES.....        | 53,822     | 18,849        | 1,586           | -                 | -                           | 200                                               | 7,078            | 26,109          | -                     |
| NATIONAL INSTITUTE OF EDUCATION.....   | 46,900     | -             | -               | -                 | -                           | -                                                 | -                | 46,900          | -                     |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,330,800  | 2,114,504     | 22,024          | 64,803            | -                           | 7,444                                             | 35,176           | 7,794           | 79,055                |
| OFFICE OF EDUCATION.....               | 16,727     | -             | -               | -                 | -                           | -                                                 | -                | 16,727          | -                     |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 1,042      | -             | -               | -                 | -                           | -                                                 | -                | 1,042           | -                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 32,265     | -             | -               | -                 | -                           | -                                                 | -                | 29,140          | 3,125                 |
| OFFICE OF THE SECRETARY.....           | 27,000     | -             | -               | -                 | -                           | -                                                 | -                | 27,000          | -                     |
| SOCIAL SECURITY ADMINISTRATION.....    | 15,084     | -             | -               | -                 | -                           | -                                                 | -                | 15,084          | -                     |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 36,268     | -             | -               | -                 | -                           | -                                                 | 3,905            | 32,363          | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 297,811    | 34,723        | 375             | 19,145            | 172,865                     | 5,076                                             | 57,565           | 6,703           | 1,359                 |
| BUREAU OF LAND MANAGEMENT.....         | 1,035      | 1,025         | -               | -                 | -                           | -                                                 | -                | 10              | -                     |
| BUREAU OF MINES.....                   | 57,265     | -             | -               | 5,600             | 3,850                       | 2,400                                             | 45,300           | 115             | -                     |
| BUREAU OF RECLAMATION.....             | 6,332      | 367           | -               | -                 | 4,721                       | -                                                 | 1,024            | 170             | 50                    |
| GEOLOGICAL SURVEY.....                 | 173,487    | -             | -               | 12,619            | 155,245                     | 2,541                                             | 3,082            | -               | -                     |
| NATIONAL PARK SERVICE.....             | 10,000     | 4,931         | -               | 36                | 669                         | -                                                 | -                | 4,013           | 351                   |
| OFF OF SURF MINING RECLAM & ENFORCE..  | 2,700      | -             | -               | -                 | 2,700                       | -                                                 | -                | -               | -                     |
| OFFICE OF THE SECRETARY.....           | 2,479      | -             | -               | -                 | 1,000                       | -                                                 | 1,479            | -               | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 19,513     | 3,400         | 375             | 890               | 4,680                       | 135                                               | 6,680            | 2,395           | 958                   |
| US FISH AND WILDLIFE SERVICE.....      | 25,000     | 25,000        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 31,131     | 600           | 3,924           | -                 | -                           | 150                                               | 1,500            | 24,957          | -                     |
| BUREAU OF PRISONS.....                 | 1,331      | -             | -               | -                 | -                           | -                                                 | -                | 1,331           | -                     |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 900        | -             | -               | -                 | -                           | -                                                 | 900              | -               | -                     |
| IMMIGRATION & NATURALIZATION SERVICE   | 100        | -             | -               | -                 | -                           | -                                                 | 100              | -               | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 26,800     | 600           | 3,924           | -                 | -                           | 150                                               | 500              | 21,626          | -                     |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2,000      | -             | -               | -                 | -                           | -                                                 | -                | 2,000           | -                     |
| DEPARTMENT OF LABOR, TOTAL.....        | 23,477     | -             | 303             | -                 | -                           | -                                                 | -                | 23,174          | -                     |
| BUREAU OF LABOR STATISTICS.....        | 860        | -             | -               | -                 | -                           | -                                                 | -                | 860             | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,758      | -             | 303             | -                 | -                           | -                                                 | -                | 5,455           | -                     |
| EMPLOYMENT STANDARDS ADMINISTRATION    | 5,593      | -             | -               | -                 | -                           | -                                                 | -                | 5,593           | -                     |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 3,050      | -             | -               | -                 | -                           | -                                                 | -                | 3,050           | -                     |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | 6,546      | -             | -               | -                 | -                           | -                                                 | -                | 6,546           | -                     |
| OFFICE OF THE SECRETARY.....           | 1,670      | -             | -               | -                 | -                           | -                                                 | -                | 1,670           | -                     |
| DEPARTMENT OF STATE, TOTAL.....        | 51,772     | 17,538        | -               | -                 | 11,885                      | -                                                 | -                | 22,349          | -                     |
| DEPARTMENTAL FUNDS.....                | 2,254      | -             | -               | -                 | 225                         | -                                                 | -                | 2,029           | -                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 49,518     | 17,538        | -               | -                 | 11,660                      | -                                                 | -                | 20,320          | -                     |

CONTINUED ON NEXT PAGE

TABLE C-16. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1979, (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL     | LIFE SCIENCES | PSYCHOLOGY | PHYSICAL SCIENCES | ENVIRONMENTAL SCIENCES | MATHEMATICS AND COMPUTER SCIENCES | ENGINEERING | SOCIAL SCIENCES | OTHER SCIENCES NEC |
|-----------------------------------------|-----------|---------------|------------|-------------------|------------------------|-----------------------------------|-------------|-----------------|--------------------|
| DEPT OF TRANSPORTATION, TOTAL.....      | 60,160    | 2,406         | -          | -                 | 1,226                  | 1,493                             | 53,574      | 1,461           | -                  |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,400     | -             | -          | -                 | -                      | -                                 | 7,400       | -               | -                  |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,700     | -             | -          | -                 | -                      | -                                 | 5,700       | -               | -                  |
| FEDERAL RAILROAD ADMINISTRATION.....    | 6,800     | -             | -          | -                 | -                      | 26                                | 6,765       | 9               | -                  |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN....  | 31,000    | 2,406         | -          | -                 | -                      | 1,467                             | 26,867      | 260             | -                  |
| OFFICE OF THE SECRETARY.....            | 2,420     | -             | -          | -                 | -                      | -                                 | 1,274       | 1,146           | -                  |
| RESEARCH & SPECIAL PROGRAM DIRECTATE    | 2,040     | -             | -          | -                 | 640                    | -                                 | 1,400       | -               | -                  |
| US COAST GUARD.....                     | 3,600     | -             | -          | -                 | 586                    | -                                 | 2,968       | 46              | -                  |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,200     | -             | -          | -                 | -                      | -                                 | 1,200       | -               | -                  |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,650     | -             | -          | 1,508             | -                      | -                                 | 672         | -               | 470                |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 550       | -             | -          | 80                | -                      | -                                 | -           | -               | 470                |
| BUREAU OF ENGRAVING AND PRINTING.....   | 2,100     | -             | -          | 1,428             | -                      | -                                 | 672         | -               | -                  |
| OTHER AGENCIES                          |           |               |            |                   |                        |                                   |             |                 |                    |
| ACTION.....                             | 3,882     | -             | -          | -                 | -                      | -                                 | -           | 3,882           | -                  |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,664     | -             | -          | -                 | -                      | -                                 | -           | 1,664           | -                  |
| APPALACHIAN REGIONAL COMMISSION.....    | 600       | -             | -          | -                 | -                      | -                                 | -           | 600             | -                  |
| CIVIL AERONAUTICS BOARD.....            | 836       | -             | -          | -                 | -                      | -                                 | -           | 836             | -                  |
| CIVIL SERVICE COMMISSION.....           | 1,127     | -             | 1,127      | -                 | -                      | -                                 | -           | -               | -                  |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000     | -             | -          | -                 | -                      | -                                 | -           | 1,000           | -                  |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 2,050     | 1,201         | -          | -                 | -                      | -                                 | 508         | 341             | -                  |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 236,100   | 86,733        | -          | 62,567            | 7,000                  | 3,200                             | 73,000      | 3,600           | -                  |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 3,365     | -             | -          | -                 | -                      | 84                                | 1,485       | 1,796           | -                  |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,316     | -             | -          | -                 | -                      | -                                 | -           | 1,316           | -                  |
| FEDERAL TRADE COMMISSION.....           | 1,319     | -             | -          | -                 | -                      | -                                 | -           | 1,319           | -                  |
| GENERAL SERVICES ADMINISTRATION.....    | 401       | -             | -          | -                 | -                      | -                                 | 332         | -               | 69                 |
| INTERNATIONAL COMMUNICATION AGENCY..... | 100       | -             | -          | -                 | -                      | -                                 | 100         | -               | -                  |
| INTERSTATE COMMERCE COMMISSION.....     | 65        | -             | -          | -                 | -                      | 30                                | -           | 35              | -                  |
| LIBRARY OF CONGRESS.....                | 400       | -             | -          | -                 | -                      | -                                 | -           | -               | 400                |
| NATIONAL AERONAUTICS & SPACE ADMIN....  | 1,451,736 | 37,601        | 14,324     | 349,073           | 344,181                | 31,144                            | 672,956     | 607             | 1,850              |
| NATIONAL SCIENCE FOUNDATION.....        | 820,850   | 134,120       | 15,067     | 215,871           | 221,080                | 47,650                            | 109,624     | 61,187          | 16,251             |
| NUCLEAR REGULATORY COMMISSION.....      | 155,030   | -             | -          | -                 | -                      | -                                 | 155,030     | -               | -                  |
| SMALL BUSINESS ADMINISTRATION.....      | 55        | -             | -          | -                 | -                      | -                                 | -           | 55              | -                  |
| SMITHSONIAN INSTITUTION.....            | 33,969    | 13,291        | -          | 6,395             | 2,621                  | -                                 | -           | 11,662          | -                  |
| TENNESSEE VALLEY AUTHORITY.....         | 46,015    | 3,327         | -          | 5,434             | 1,843                  | -                                 | 34,614      | -               | 797                |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,931     | -             | -          | 943               | 200                    | 230                               | 104         | 1,454           | -                  |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,666     | -             | -          | -                 | -                      | -                                 | -           | 2,666           | -                  |
| VETERANS ADMINISTRATION.....            | 100,657   | 86,533        | 10,444     | -                 | -                      | -                                 | 3,680       | -               | -                  |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-17. FEDERAL OBLIGATIONS FOR RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                            |                   |                                       | PHYSICAL SCIENCES |           |           |         |                             |
|---------------------------------------------|------------|----------------------------|-------------------|---------------------------------------|-------------------|-----------|-----------|---------|-----------------------------|
|                                             | TOTAL      | BIO-<br>LOGICAL<br>ASPECTS | SOCIAL<br>ASPECTS | PSYCHO-<br>LOGICAL<br>SCIENCES<br>NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 159,119    | 57,804                     | 76,838            | 24,477                                | 1,510,570         | 199,068   | 411,204   | 841,463 | 58,835                      |
| DEPARTMENTS                                 |            |                            |                   |                                       |                   |           |           |         |                             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 85         | -                          | 85                | -                                     | 63,434            | -         | 53,796    | 9,638   | -                           |
| FOREST SERVICE.....                         | 85         | -                          | 85                | -                                     | 4,818             | -         | 2,849     | 1,969   | -                           |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                          | -                 | -                                     | 58,616            | -         | 50,947    | 7,669   | -                           |
| COOPERATIVE RESEARCH.....                   | -          | -                          | -                 | -                                     | 6,363             | -         | 6,363     | -       | -                           |
| FEDERAL RESEARCH.....                       | -          | -                          | -                 | -                                     | 52,253            | -         | 44,584    | 7,669   | -                           |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 203        | -                          | 203               | -                                     | 27,799            | 530       | 9,545     | 17,724  | -                           |
| BUREAU OF THE CENSUS.....                   | 196        | -                          | 196               | -                                     | -                 | -         | -         | -       | -                           |
| NATIONAL BUREAU OF STANDARDS.....           | -          | -                          | -                 | -                                     | 24,703            | 530       | 7,762     | 16,411  | -                           |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 7          | -                          | 7                 | -                                     | 2,524             | -         | 1,211     | 1,313   | -                           |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -          | -                          | -                 | -                                     | 572               | -         | 572       | -       | -                           |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 57,025     | 1,865                      | 50,071            | 5,089                                 | 289,332           | 11,217    | 90,884    | 149,847 | 37,384                      |
| DEPARTMENT OF THE ARMY.....                 | 20,707     | 135                        | 19,398            | 1,174                                 | 82,911            | 148       | 62,544    | 19,983  | 236                         |
| DEPARTMENT OF THE NAVY.....                 | 10,624     | -                          | 10,624            | -                                     | 95,250            | 7,758     | 15,290    | 71,342  | 860                         |
| DEPARTMENT OF THE AIR FORCE.....            | 18,556     | 753                        | 17,803            | -                                     | 30,920            | 3,311     | 11,808    | 13,930  | 1,071                       |
| DEFENSE AGENCIES.....                       | 6,928      | 977                        | 2,036             | 3,915                                 | 80,097            | -         | 1,242     | 44,438  | 34,417                      |
| DEPARTMENT-WIDE FUNDS.....                  | 210        | -                          | 210               | -                                     | 154               | -         | -         | 154     | -                           |
| DEPARTMENT OF ENERGY.....                   | -          | -                          | -                 | -                                     | 552,766           | -         | 76,302    | 469,244 | 7,220                       |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 66,301     | 27,594                     | 19,960            | 18,747                                | 54,002            | -         | 49,271    | 4,731   | -                           |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 46,563     | 27,594                     | 18,969            | -                                     | 938               | -         | 938       | -       | -                           |
| HUMAN DEVELOPMENT SERVICES.....             | 1,454      | -                          | 991               | 463                                   | -                 | -         | -         | -       | -                           |
| NATIONAL INSTITUTES OF HEALTH.....          | 18,284     | -                          | -                 | 18,284                                | 53,064            | -         | 48,333    | 4,731   | -                           |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 320        | -                          | 320               | -                                     | 13,820            | 27        | 11,236    | 1,757   | 800                         |
| BUREAU OF MINES.....                        | -          | -                          | -                 | -                                     | 3,680             | -         | 2,760     | 120     | 800                         |
| GEOLOGICAL SURVEY.....                      | -          | -                          | -                 | -                                     | 9,448             | -         | 7,938     | 1,510   | -                           |
| NATIONAL PARK SERVICE.....                  | -          | -                          | -                 | -                                     | 27                | 27        | -         | -       | -                           |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 320        | -                          | 320               | -                                     | 665               | -         | 538       | 127     | -                           |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 1,149      | -                          | 1,149             | -                                     | -                 | -         | -         | -       | -                           |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 1,149      | -                          | 1,149             | -                                     | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF LABOR, TOTAL.....             | 272        | -                          | 272               | -                                     | -                 | -         | -         | -       | -                           |
| EMPLOYMENT AND TRAINING ADMIN.....          | 272        | -                          | 272               | -                                     | -                 | -         | -         | -       | -                           |
| DEPT OF TRANSPORTATION, TOTAL.....          | 66         | -                          | 66                | -                                     | -                 | -         | -         | -       | -                           |
| OFFICE OF THE SECRETARY.....                | 66         | -                          | 66                | -                                     | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | -          | -                          | -                 | -                                     | 1,236             | -         | 294       | 202     | 740                         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS.....   | -          | -                          | -                 | -                                     | 80                | -         | 40        | 40      | -                           |
| BUREAU OF ENGRAVING AND PRINTING.....       | -          | -                          | -                 | -                                     | 1,156             | -         | 254       | 162     | 740                         |
| OTHER AGENCIES                              |            |                            |                   |                                       |                   |           |           |         |                             |
| CIVIL SERVICE COMMISSION.....               | 1,085      | -                          | 1,085             | -                                     | -                 | -         | -         | -       | -                           |
| ENVIRONMENTAL PROTECTION AGENCY.....        | -          | -                          | -                 | -                                     | 50,155            | -         | 46,035    | 4,120   | -                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 11,651     | 10,443                     | 567               | 641                                   | 264,156           | 140,702   | 11,750    | 99,046  | 12,658                      |
| NATIONAL SCIENCE FOUNDATION.....            | 11,381     | 8,368                      | 3,013             | -                                     | 184,160           | 41,585    | 57,656    | 84,886  | 33                          |
| SMITHSONIAN INSTITUTION.....                | -          | -                          | -                 | -                                     | 5,007             | 5,007     | -         | -       | -                           |
| TENNESSEE VALLEY AUTHORITY.....             | -          | -                          | -                 | -                                     | 4,384             | -         | 4,384     | -       | -                           |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -          | -                          | -                 | -                                     | 319               | -         | 51        | 268     | -                           |
| VETERANS ADMINISTRATION.....                | 9,581      | 9,534                      | 47                | -                                     | -                 | -         | -         | -       | -                           |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-18. FEDERAL OBLIGATIONS FOR RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                    | PSYCHOLOGY |                            |                   |                                       | PHYSICAL SCIENCES |           |           |         |                             |
|-------------------------------------------|------------|----------------------------|-------------------|---------------------------------------|-------------------|-----------|-----------|---------|-----------------------------|
|                                           | TOTAL      | BIO-<br>LOGICAL<br>ASPECTS | SOCIAL<br>ASPECTS | PSYCHO-<br>LOGICAL<br>SCIENCES<br>NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                  | 177,882    | 63,266                     | 85,623            | 28,993                                | 1,695,904         | 239,565   | 464,692   | 916,679 | 74,968                      |
| DEPARTMENTS                               |            |                            |                   |                                       |                   |           |           |         |                             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....     | 101        | -                          | 101               | -                                     | 69,314            | -         | 58,529    | 10,785  | -                           |
| FOREST SERVICE.....                       | 101        | -                          | 101               | -                                     | 5,711             | -         | 3,377     | 2,334   | -                           |
| SCIENCE AND EDUCATION ADMINISTRATION..... | -          | -                          | -                 | -                                     | 63,603            | -         | 55,152    | 8,451   | -                           |
| COOPERATIVE RESEARCH.....                 | -          | -                          | -                 | -                                     | 7,134             | -         | 7,134     | -       | -                           |
| FEDERAL RESEARCH.....                     | -          | -                          | -                 | -                                     | 56,469            | -         | 48,018    | 8,451   | -                           |
| DEPARTMENT OF COMMERCE, TOTAL.....        | 229        | -                          | 229               | -                                     | 29,536            | 577       | 9,973     | 18,986  | -                           |
| BUREAU OF THE CENSUS.....                 | 221        | -                          | 221               | -                                     | -                 | -         | -         | -       | -                           |
| NATIONAL BUREAU OF STANDARDS.....         | -          | -                          | -                 | -                                     | 26,348            | 577       | 8,149     | 17,622  | -                           |
| NATIONAL FIRE PREV & CONTROL ADMIN.....   | 8          | -                          | 8                 | -                                     | 2,619             | -         | 1,255     | 1,364   | -                           |
| NATIONAL OCEANIC AND ATMOS ADMIN.....     | -          | -                          | -                 | -                                     | 569               | -         | 569       | -       | -                           |
| DEPARTMENT OF DEFENSE, TOTAL.....         | 62,009     | 1,728                      | 54,175            | 6,106                                 | 304,613           | 11,150    | 93,822    | 149,562 | 50,079                      |
| DEPARTMENT OF THE ARMY.....               | 22,210     | 300                        | 20,694            | 1,216                                 | 96,838            | -         | 61,907    | 23,174  | 11,757                      |
| DEPARTMENT OF THE NAVY.....               | 11,644     | -                          | 11,644            | -                                     | 100,940           | 7,685     | 18,787    | 73,818  | 650                         |
| DEPARTMENT OF THE AIR FORCE.....          | 19,962     | 774                        | 19,188            | -                                     | 32,270            | 3,465     | 12,331    | 14,507  | 1,967                       |
| DEFENSE AGENCIES.....                     | 7,089      | 654                        | 1,545             | 4,890                                 | 73,737            | -         | 797       | 37,235  | 35,705                      |
| DEPARTMENTWIDE FUNDS.....                 | 1,104      | -                          | 1,104             | -                                     | 828               | -         | -         | 828     | -                           |
| DEPARTMENT OF ENERGY.....                 | -          | -                          | -                 | -                                     | 629,501           | -         | 94,398    | 527,393 | 7,710                       |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL    | 72,339     | 29,523                     | 21,609            | 21,207                                | 61,134            | -         | 55,788    | 5,346   | -                           |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....  | 50,051     | 29,523                     | 20,528            | -                                     | 970               | -         | 970       | -       | -                           |
| HUMAN DEVELOPMENT SERVICES.....           | 1,586      | -                          | 1,081             | 505                                   | -                 | -         | -         | -       | -                           |
| NATIONAL INSTITUTES OF HEALTH.....        | 20,702     | -                          | -                 | 20,702                                | 60,164            | -         | 54,818    | 5,346   | -                           |
| DEPARTMENT OF THE INTERIOR, TOTAL.....    | 350        | -                          | 350               | -                                     | 16,864            | 34        | 13,321    | 2,309   | 1,200                       |
| BUREAU OF MINES.....                      | -          | -                          | -                 | -                                     | 4,400             | -         | 3,050     | 150     | 1,200                       |
| GEOLOGICAL SURVEY.....                    | -          | -                          | -                 | -                                     | 11,620            | -         | 9,626     | 1,994   | -                           |
| NATIONAL PARK SERVICE.....                | -          | -                          | -                 | -                                     | 34                | 34        | -         | -       | -                           |
| OFFICE OF WATER RES AND TECHNOLOGY.....   | 350        | -                          | 350               | -                                     | 810               | -         | 645       | 165     | -                           |
| DEPARTMENT OF JUSTICE, TOTAL.....         | 4,525      | -                          | 3,605             | 920                                   | -                 | -         | -         | -       | -                           |
| DRUG ENFORCEMENT ADMINISTRATION.....      | 300        | -                          | -                 | 300                                   | -                 | -         | -         | -       | -                           |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....     | 4,225      | -                          | 3,605             | 620                                   | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF LABOR, TOTAL.....           | 292        | -                          | 292               | -                                     | -                 | -         | -         | -       | -                           |
| EMPLOYMENT AND TRAINING ADMIN.....        | 292        | -                          | 292               | -                                     | -                 | -         | -         | -       | -                           |
| DEPT OF TRANSPORTATION, TOTAL.....        | 87         | -                          | 87                | -                                     | -                 | -         | -         | -       | -                           |
| OFFICE OF THE SECRETARY.....              | 87         | -                          | 87                | -                                     | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF THE TREASURY, TOTAL.....    | -          | -                          | -                 | -                                     | 1,304             | -         | 310       | 211     | 783                         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS..... | -          | -                          | -                 | -                                     | 80                | -         | 40        | 40      | -                           |
| BUREAU OF ENGRAVING AND PRINTING.....     | -          | -                          | -                 | -                                     | 1,224             | -         | 270       | 171     | 783                         |
| OTHER AGENCIES                            |            |                            |                   |                                       |                   |           |           |         |                             |
| CIVIL SERVICE COMMISSION.....             | 1,127      | -                          | 1,127             | -                                     | -                 | -         | -         | -       | -                           |
| ENVIRONMENTAL PROTECTION AGENCY.....      | -          | -                          | -                 | -                                     | 62,984            | -         | 58,044    | 4,940   | -                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.....   | 13,120     | 11,855                     | 505               | 760                                   | 312,860           | 176,743   | 12,402    | 108,554 | 15,161                      |
| NATIONAL SCIENCE FOUNDATION.....          | 13,189     | 9,697                      | 3,492             | -                                     | 196,601           | 45,078    | 63,118    | 88,370  | 35                          |
| SMITHSONIAN INSTITUTION.....              | -          | -                          | -                 | -                                     | 5,983             | 5,983     | -         | -       | -                           |
| TENNESSEE VALLEY AUTHORITY.....           | -          | -                          | -                 | -                                     | 4,937             | -         | 4,937     | -       | -                           |
| US ARMS CONTROL & DISARMAMENT AGENCY..... | -          | -                          | -                 | -                                     | 273               | -         | 50        | 223     | -                           |
| VETERANS ADMINISTRATION.....              | 10,514     | 10,463                     | 51                | -                                     | -                 | -         | -         | -       | -                           |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-19. FEDERAL OBLIGATIONS FOR RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                            |                   |                                       | PHYSICAL SCIENCES |           |           |         |                             |
|---------------------------------------------|------------|----------------------------|-------------------|---------------------------------------|-------------------|-----------|-----------|---------|-----------------------------|
|                                             | TOTAL      | BIO-<br>LOGICAL<br>ASPECTS | SOCIAL<br>ASPECTS | PSYCHO-<br>LOGICAL<br>SCIENCES<br>NEG | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL<br>SCIENCES<br>NEG |
| TOTAL, ALL AGENCIES.....                    | 200,272    | 71,003                     | 97,686            | 31,583                                | 1,818,728         | 276,624   | 499,784   | 944,826 | 97,494                      |
| DEPARTMENTS                                 |            |                            |                   |                                       |                   |           |           |         |                             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 98         | -                          | 98                | -                                     | 71,541            | -         | 60,604    | 10,937  | -                           |
| FOREST SERVICE.....                         | 98         | -                          | 98                | -                                     | 5,517             | -         | 3,262     | 2,255   | -                           |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                          | -                 | -                                     | 66,024            | -         | 57,342    | 8,682   | -                           |
| COOPERATIVE RESEARCH.....                   | -          | -                          | -                 | -                                     | 6,380             | -         | 6,380     | -       | -                           |
| FEDERAL RESEARCH.....                       | -          | -                          | -                 | -                                     | 59,644            | -         | 50,962    | 8,682   | -                           |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 288        | -                          | 288               | -                                     | 29,657            | 651       | 9,571     | 19,435  | -                           |
| BUREAU OF THE CENSUS.....                   | 278        | -                          | 278               | -                                     | -                 | -         | -         | -       | -                           |
| NATIONAL BUREAU OF STANDARDS.....           | -          | -                          | -                 | -                                     | 26,649            | 651       | 7,816     | 18,182  | -                           |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 10         | -                          | 10                | -                                     | 2,412             | -         | 1,159     | 1,253   | -                           |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -          | -                          | -                 | -                                     | 596               | -         | 596       | -       | -                           |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 68,669     | 1,799                      | 60,141            | 6,729                                 | 338,891           | 12,003    | 104,709   | 150,809 | 71,370                      |
| DEPARTMENT OF THE ARMY.....                 | 27,798     | 500                        | 26,007            | 1,291                                 | 97,279            | -         | 69,766    | 18,988  | 8,525                       |
| DEPARTMENT OF THE NAVY.....                 | 13,337     | -                          | 13,337            | -                                     | 107,852           | 8,285     | 20,849    | 74,962  | 3,756                       |
| DEPARTMENT OF THE AIR FORCE.....            | 20,183     | 784                        | 19,399            | -                                     | 34,368            | 3,718     | 13,146    | 15,364  | 2,140                       |
| DEFENSE AGENCIES.....                       | 6,519      | 515                        | 566               | 5,438                                 | 98,768            | -         | 948       | 40,871  | 56,949                      |
| DEPARTMENTWIDE FUNDS.....                   | 832        | -                          | 832               | -                                     | 624               | -         | -         | 824     | -                           |
| DEPARTMENT OF ENERGY.....                   | -          | -                          | -                 | -                                     | 652,282           | -         | 104,943   | 540,780 | 6,559                       |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 85,653     | 34,783                     | 28,341            | 22,529                                | 65,421            | -         | 59,869    | 5,552   | -                           |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 62,043     | 34,783                     | 27,260            | -                                     | 618               | -         | 618       | -       | -                           |
| HUMAN DEVELOPMENT SERVICES.....             | 1,586      | -                          | 1,081             | 505                                   | -                 | -         | -         | -       | -                           |
| NATIONAL INSTITUTES OF HEALTH.....          | 22,024     | -                          | -                 | 22,024                                | 64,803            | -         | 59,251    | 5,552   | -                           |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 375        | -                          | 375               | -                                     | 19,145            | 36        | 15,078    | 2,631   | 1,400                       |
| BUREAU OF MINES.....                        | -          | -                          | -                 | -                                     | 5,600             | -         | 4,000     | 200     | 1,400                       |
| GEOLOGICAL SURVEY.....                      | -          | -                          | -                 | -                                     | 12,619            | -         | 10,378    | 2,241   | -                           |
| NATIONAL PARK SERVICE.....                  | -          | -                          | -                 | -                                     | 36                | 36        | -         | -       | -                           |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 375        | -                          | 375               | -                                     | 890               | -         | 700       | 190     | -                           |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 3,924      | -                          | 2,359             | 1,565                                 | -                 | -         | -         | -       | -                           |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 3,924      | -                          | 2,359             | 1,565                                 | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF LABOR, TOTAL.....             | 303        | -                          | 303               | -                                     | -                 | -         | -         | -       | -                           |
| EMPLOYMENT AND TRAINING ADMIN.....          | 303        | -                          | 303               | -                                     | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | -          | -                          | -                 | -                                     | 1,508             | -         | 354       | 240     | 914                         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS.....   | -          | -                          | -                 | -                                     | 80                | -         | 40        | 40      | -                           |
| BUREAU OF ENGRAVING AND PRINTING.....       | -          | -                          | -                 | -                                     | 1,428             | -         | 314       | 200     | 914                         |
| OTHER AGENCIES                              |            |                            |                   |                                       |                   |           |           |         |                             |
| CIVIL SERVICE COMMISSION.....               | 1,127      | -                          | 1,127             | -                                     | -                 | -         | -         | -       | -                           |
| ENVIRONMENTAL PROTECTION AGENCY.....        | -          | -                          | -                 | -                                     | 62,567            | -         | 58,000    | 4,567   | -                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 14,324     | 13,075                     | 489               | 760                                   | 349,073           | 208,103   | 11,501    | 112,250 | 17,219                      |
| NATIONAL SCIENCE FOUNDATION.....            | 15,067     | 10,953                     | 4,114             | -                                     | 215,871           | 49,436    | 69,686    | 96,717  | 32                          |
| SMITHSONIAN INSTITUTION.....                | -          | -                          | -                 | -                                     | 6,395             | 6,395     | -         | -       | -                           |
| TENNESSEE VALLEY AUTHORITY.....             | -          | -                          | -                 | -                                     | 5,434             | -         | 5,434     | -       | -                           |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -          | -                          | -                 | -                                     | 943               | -         | 35        | 908     | -                           |
| VETERANS ADMINISTRATION.....                | 10,444     | 10,393                     | 51                | -                                     | -                 | -         | -         | -       | -                           |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-20. FEDERAL OBLIGATIONS FOR RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |                 |                     |                              |                         | ENVIRONMENTAL SCIENCES |                  |                 |                   |                                       |
|---------------------------------------------|---------------|-----------------|---------------------|------------------------------|-------------------------|------------------------|------------------|-----------------|-------------------|---------------------------------------|
|                                             | TOTAL         | BIO-<br>LOGICAL | CLINICAL<br>MEDICAL | OTHER<br>MEDICAL<br>SCIENCES | LIFE<br>SCIENCES<br>NEC | TOTAL                  | ATMOS-<br>PHERIC | GEO-<br>LOGICAL | OCEAN-<br>OGRAPHY | ENVIRON-<br>MENTAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 3,019,384     | 1,509,321       | 871,517             | 538,045                      | 100,501                 | 921,040                | 324,828          | 276,846         | 197,394           | 121,972                               |
| DEPARTMENTS                                 |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 334,176       | 328,417         | 5,759               | -                            | -                       | 14,104                 | 4,935            | 6,898           | -                 | 2,271                                 |
| FOREST SERVICE.....                         | 53,863        | 53,863          | -                   | -                            | -                       | 9,716                  | 3,326            | 6,390           | -                 | -                                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 240,313       | 274,554         | 5,759               | -                            | -                       | 4,388                  | 1,609            | 508             | -                 | 2,271                                 |
| COOPERATIVE RESEARCH.....                   | 87,448        | 81,689          | 5,759               | -                            | -                       | 796                    | 796              | -               | -                 | -                                     |
| FEDERAL RESEARCH.....                       | 192,865       | 192,865         | -                   | -                            | -                       | 3,592                  | 813              | 508             | -                 | 2,271                                 |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 49,950        | 49,790          | -                   | 160                          | -                       | 61,652                 | 37,478           | 1,146           | 23,028            | -                                     |
| NATIONAL BUREAU OF STANDARDS.....           | -             | -               | -                   | -                            | -                       | 106                    | -                | 106             | -                 | -                                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 160           | -               | -                   | 160                          | -                       | -                      | -                | -               | -                 | -                                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 49,790        | 49,790          | -                   | -                            | -                       | 61,546                 | 37,478           | 1,040           | 23,028            | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 147,576       | 28,336          | 57,102              | 60,587                       | 1,551                   | 125,852                | 50,206           | 21,606          | 47,693            | 6,347                                 |
| DEPARTMENT OF THE ARMY.....                 | 85,627        | 17,504          | 49,689              | 18,174                       | 260                     | 10,512                 | 3,570            | 6,690           | 117               | 135                                   |
| DEPARTMENT OF THE NAVY.....                 | 20,549        | 5,318           | 6,756               | 7,999                        | 476                     | 59,406                 | 5,857            | 2,847           | 46,058            | 4,644                                 |
| DEPARTMENT OF THE AIR FORCE.....            | 35,562        | 1,368           | 567                 | 33,627                       | -                       | 31,862                 | 29,663           | 1,603           | -                 | 596                                   |
| DEFENSE AGENCIES.....                       | 5,650         | 4,048           | -                   | 787                          | 815                     | 24,072                 | 11,116           | 10,466          | 1,518             | 972                                   |
| DEPARTMENTWIDE FUNDS.....                   | 188           | 98              | 90                  | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF ENERGY.....                   | 114,863       | 81,231          | 2,100               | 6,928                        | 24,604                  | 84,765                 | 13,433           | 28,389          | 13,354            | 29,589                                |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 2,004,215     | 749,179         | 754,361             | 430,293                      | 70,382                  | -                      | -                | -               | -                 | -                                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 76,950        | 49,423          | 10,206              | 2,845                        | 14,476                  | -                      | -                | -               | -                 | -                                     |
| CENTER FOR DISEASE CONTROL.....             | 55,273        | -               | -                   | 55,273                       | -                       | -                      | -                | -               | -                 | -                                     |
| FOOD AND DRUG ADMINISTRATION.....           | 42,872        | 34,115          | -                   | 8,757                        | -                       | -                      | -                | -               | -                 | -                                     |
| HEALTH SERVICES ADMINISTRATION.....         | 9,521         | -               | 4,351               | 4,870                        | 300                     | -                      | -                | -               | -                 | -                                     |
| HUMAN DEVELOPMENT SERVICES.....             | 16,809        | -               | 15,921              | 736                          | 152                     | -                      | -                | -               | -                 | -                                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,802,790     | 665,641         | 723,883             | 357,812                      | 55,454                  | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 28,789        | 28,680          | -                   | 58                           | 51                      | 129,499                | 6,652            | 104,734         | 14,964            | 3,149                                 |
| BUREAU OF LAND MANAGEMENT.....              | 767           | 767             | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| BUREAU OF MINES.....                        | -             | -               | -                   | -                            | -                       | 2,870                  | -                | 2,570           | -                 | 300                                   |
| BUREAU OF RECLAMATION.....                  | 500           | 500             | -                   | -                            | -                       | 6,523                  | 6,373            | -               | 150               | -                                     |
| GEOLOGICAL SURVEY.....                      | -             | -               | -                   | -                            | -                       | 115,595                | -                | 99,824          | 14,798            | 973                                   |
| NATIONAL PARK SERVICE.....                  | 3,830         | 3,822           | -                   | -                            | 8                       | 502                    | 1                | 297             | -                 | 204                                   |
| OFFICE OF THE SECRETARY.....                | -             | -               | -                   | -                            | -                       | 1,056                  | -                | 4               | -                 | 1,052                                 |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 1,892         | 1,791           | -                   | 58                           | 43                      | 2,953                  | 278              | 2,039           | 16                | 620                                   |
| US FISH AND WILDLIFE SERVICE.....           | 21,800        | 21,800          | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 172           | -               | -                   | 172                          | -                       | -                      | -                | -               | -                 | -                                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 172           | -               | -                   | 172                          | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF STATE, TOTAL.....             | 22,661        | 19,780          | 2,841               | -                            | 840                     | 7,161                  | -                | 171             | -                 | 6,990                                 |
| DEPARTMENTAL FUNDS.....                     | 171           | 171             | -                   | -                            | -                       | 171                    | -                | 171             | -                 | -                                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 22,490        | 19,609          | 2,041               | -                            | 840                     | 6,990                  | -                | -               | -                 | 6,990                                 |
| DEPT OF TRANSPORTATION, TOTAL.....          | 2,135         | -               | 2,135               | -                            | -                       | 420                    | 5                | -               | 407               | 8                                     |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 2,135         | -               | 2,135               | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| OFFICE OF THE SECRETARY.....                | -             | -               | -                   | -                            | -                       | 13                     | 5                | -               | -                 | 8                                     |
| US COAST GUARD.....                         | -             | -               | -                   | -                            | -                       | 407                    | -                | -               | 407               | -                                     |
| OTHER AGENCIES                              |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 1,423         | -               | -                   | -                            | 1,423                   | -                      | -                | -               | -                 | -                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 76,762        | 72,250          | -                   | 4,512                        | -                       | 6,205                  | 940              | 3,590           | 1,675             | -                                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 29,056        | 15,268          | 1,250               | 10,968                       | 1,570                   | 305,597                | 145,989          | 54,034          | 31,973            | 73,596                                |
| NATIONAL SCIENCE FOUNDATION.....            | 113,322       | 112,120         | -                   | 1,122                        | 80                      | 182,361                | 64,200           | 54,476          | 63,662            | 22                                    |
| SMITHSONIAN INSTITUTION.....                | 12,554        | 12,554          | -                   | -                            | -                       | 2,381                  | 103              | 1,642           | 638               | -                                     |
| TENNESSEE VALLEY AUTHORITY.....             | 2,346         | 2,346           | -                   | -                            | -                       | 887                    | 887              | -               | -                 | -                                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -             | -               | -                   | -                            | -                       | 160                    | -                | 160             | -                 | -                                     |
| VETERANS ADMINISTRATION.....                | 79,384        | 9,370           | 46,769              | 23,245                       | -                       | -                      | -                | -               | -                 | -                                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-21. FEDERAL OBLIGATIONS FOR RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |                 |                     |                              |                         | ENVIRONMENTAL SCIENCES |                  |                 |                   |                                       |
|---------------------------------------------|---------------|-----------------|---------------------|------------------------------|-------------------------|------------------------|------------------|-----------------|-------------------|---------------------------------------|
|                                             | TOTAL         | BIO-<br>LOGICAL | CLINICAL<br>MEDICAL | OTHER<br>MEDICAL<br>SCIENCES | LIFE<br>SCIENCES<br>NEC | TOTAL                  | ATMOS-<br>PHERIC | GEO-<br>LOGICAL | OCEAN-<br>OGRAPHY | ENVIRON-<br>MENTAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 3,302,927     | 1,693,973       | 971,480             | 606,537                      | 110,937                 | 1,011,778              | 329,053          | 334,764         | 206,343           | 141,618                               |
| DEPARTMENTS                                 |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 393,509       | 387,053         | 6,456               | -                            | -                       | 16,399                 | 5,701            | 8,165           | -                 | 2,533                                 |
| FOREST SERVICE.....                         | 63,260        | 63,260          | -                   | -                            | -                       | 11,517                 | 3,941            | 7,576           | -                 | -                                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 330,249       | 323,793         | 6,456               | -                            | -                       | 4,882                  | 1,760            | 589             | -                 | 2,533                                 |
| COOPERATIVE RESEARCH.....                   | 112,964       | 106,508         | 6,456               | -                            | -                       | 891                    | 891              | -               | -                 | -                                     |
| FEDERAL RESEARCH.....                       | 217,285       | 217,285         | -                   | -                            | -                       | 3,991                  | 869              | 589             | -                 | 2,533                                 |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 56,272        | 56,095          | -                   | 177                          | -                       | 65,753                 | 39,863           | 1,143           | 24,747            | -                                     |
| NATIONAL BUREAU OF STANDARDS.....           | -             | -               | -                   | -                            | -                       | 116                    | -                | 116             | -                 | -                                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 177           | -               | -                   | 177                          | -                       | -                      | -                | -               | -                 | -                                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 56,095        | 56,095          | -                   | -                            | -                       | 65,637                 | 39,863           | 1,027           | 24,747            | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 152,296       | 27,833          | 61,181              | 60,710                       | 2,572                   | 135,032                | 53,179           | 20,914          | 53,649            | 7,290                                 |
| DEPARTMENT OF THE ARMY.....                 | 85,609        | 16,267          | 52,934              | 16,128                       | 280                     | 12,728                 | 5,403            | 6,820           | 273               | 232                                   |
| DEPARTMENT OF THE NAVY.....                 | 22,014        | 5,668           | 7,064               | 8,745                        | 537                     | 64,359                 | 6,106            | 3,482           | 50,005            | 4,766                                 |
| DEPARTMENT OF THE AIR FORCE.....            | 37,268        | 1,635           | 700                 | 34,933                       | -                       | 33,605                 | 31,110           | 1,797           | -                 | 698                                   |
| DEFENSE AGENCIES.....                       | 6,439         | 3,780           | -                   | 904                          | 1,755                   | 24,340                 | 10,560           | 8,815           | 3,371             | 1,594                                 |
| DEPARTMENTWIDE FUNDS.....                   | 966           | 483             | 483                 | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF ENERGY.....                   | 122,471       | 88,048          | -                   | 6,966                        | 27,457                  | 97,520                 | 16,309           | 31,081          | 15,119            | 35,011                                |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 2,256,801     | 845,447         | 847,041             | 486,258                      | 78,055                  | -                      | -                | -               | -                 | -                                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 81,759        | 52,309          | 11,396              | 3,156                        | 14,898                  | -                      | -                | -               | -                 | -                                     |
| CENTER FOR DISEASE CONTROL.....             | 62,664        | -               | -                   | 62,664                       | -                       | -                      | -                | -               | -                 | -                                     |
| FOOD AND DRUG ADMINISTRATION.....           | 48,600        | 38,450          | -                   | 10,150                       | -                       | -                      | -                | -               | -                 | -                                     |
| HEALTH SERVICES ADMINISTRATION.....         | 9,786         | -               | 4,616               | 4,870                        | 300                     | -                      | -                | -               | -                 | -                                     |
| HUMAN DEVELOPMENT SERVICES.....             | 17,361        | -               | 16,392              | 803                          | 166                     | -                      | -                | -               | -                 | -                                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 2,030,631     | 754,688         | 814,637             | 404,615                      | 62,691                  | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 32,409        | 32,284          | -                   | 75                           | 50                      | 172,333                | 8,506            | 137,601         | 15,138            | 11,088                                |
| BUREAU OF LAND MANAGEMENT.....              | 1,046         | 1,046           | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| BUREAU OF MINES.....                        | -             | -               | -                   | -                            | -                       | 3,850                  | 450              | 3,050           | -                 | 350                                   |
| BUREAU OF RECLAMATION.....                  | 404           | 404             | -                   | -                            | -                       | 8,181                  | 7,695            | 171             | 469               | -                                     |
| GEOLOGICAL SURVEY.....                      | -             | -               | -                   | -                            | -                       | 145,757                | -                | 131,128         | 14,629            | -                                     |
| NATIONAL PARK SERVICE.....                  | 4,724         | 4,724           | -                   | -                            | -                       | 635                    | 1                | 376             | -                 | 258                                   |
| OFF OF SURF MINING RECLAM & ENFORCE.....    | -             | -               | -                   | -                            | -                       | 7,800                  | -                | -               | -                 | 7,800                                 |
| OFFICE OF THE SECRETARY.....                | -             | -               | -                   | -                            | -                       | 1,855                  | -                | -               | -                 | 1,855                                 |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 3,035         | 2,910           | -                   | 75                           | 50                      | 4,255                  | 360              | 3,030           | 40                | 825                                   |
| US FISH AND WILDLIFE SERVICE.....           | 23,200        | 23,200          | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 607           | -               | -                   | 607                          | -                       | -                      | -                | -               | -                 | -                                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 607           | -               | -                   | 607                          | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF STATE, TOTAL.....             | 14,854        | 13,014          | 1,840               | -                            | -                       | 1,972                  | -                | 224             | -                 | 1,748                                 |
| DEPARTMENTAL FUNDS.....                     | 3             | 3               | -                   | -                            | -                       | 224                    | -                | 224             | -                 | -                                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 14,851        | 13,011          | 1,840               | -                            | -                       | 1,748                  | -                | -               | -                 | 1,748                                 |
| DEPT OF TRANSPORTATION, TOTAL.....          | 2,235         | -               | 2,235               | -                            | -                       | 213                    | 7                | -               | 195               | 11                                    |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 2,235         | -               | 2,235               | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| OFFICE OF THE SECRETARY.....                | -             | -               | -                   | -                            | -                       | 181                    | 7                | -               | -                 | 11                                    |
| US COAST GUARD.....                         | -             | -               | -                   | -                            | -                       | 195                    | -                | -               | 195               | -                                     |
| OTHER AGENCIES                              |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 1,033         | -               | -                   | -                            | 1,033                   | -                      | -                | -               | -                 | -                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 87,986        | 79,086          | -                   | 8,900                        | -                       | 7,134                  | 2,100            | 3,534           | 1,500             | -                                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 36,268        | 17,183          | 1,400               | 16,035                       | 1,650                   | 308,299                | 132,658          | 68,750          | 23,032            | 83,859                                |
| NATIONAL SCIENCE FOUNDATION.....            | 123,728       | 122,310         | -                   | 1,298                        | 120                     | 203,319                | 69,718           | 61,254          | 72,269            | 78                                    |
| SMITHSONIAN INSTITUTION.....                | 12,703        | 12,703          | -                   | -                            | -                       | 2,540                  | 96               | 1,760           | 684               | -                                     |
| TENNESSEE VALLEY AUTHORITY.....             | 4,637         | 2,637           | -                   | -                            | -                       | 916                    | 916              | -               | -                 | -                                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -             | -               | -                   | -                            | -                       | 348                    | -                | 338             | 10                | -                                     |
| VETERANS ADMINISTRATION.....                | 87,118        | 10,280          | 51,327              | 25,511                       | -                       | -                      | -                | -               | -                 | -                                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-22. FEDERAL OBLIGATIONS FOR RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | LIFE SCIENCES |                 |                     |                              |                         | ENVIRONMENTAL SCIENCES |                  |                 |                   |                                       |
|----------------------------------------|---------------|-----------------|---------------------|------------------------------|-------------------------|------------------------|------------------|-----------------|-------------------|---------------------------------------|
|                                        | TOTAL         | BIO-<br>LOGICAL | CLINICAL<br>MEDICAL | OTHER<br>MEDICAL<br>SCIENCES | LIFE<br>SCIENCES<br>NEC | TOTAL                  | ATMOS-<br>PHERIC | GEO-<br>LOGICAL | OCEAN-<br>OGRAPHY | ENVIRON-<br>MENTAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 3,506,920     | 1,785,018       | 974,061             | 630,966                      | 116,875                 | 1,109,503              | 372,329          | 362,586         | 224,956           | 149,632                               |
| DEPARTMENTS                            |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 400,063       | 394,289         | 5,774               | -                            | -                       | 15,997                 | 5,544            | 7,885           | -                 | 2,568                                 |
| FOREST SERVICE.....                    | 61,100        | 61,100          | -                   | -                            | -                       | 11,123                 | 3,806            | 7,317           | -                 | -                                     |
| SCIENCE AND EDUCATION ADMINISTRATION   | 338,963       | 333,189         | 5,774               | -                            | -                       | 4,874                  | 1,738            | 568             | -                 | 2,568                                 |
| COOPERATIVE RESEARCH.....              | 117,678       | 111,904         | 5,774               | -                            | -                       | 798                    | -                | -               | -                 | -                                     |
| FEDERAL RESEARCH.....                  | 221,285       | 221,285         | -                   | -                            | -                       | 4,076                  | 940              | 568             | -                 | 2,568                                 |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 60,661        | 60,484          | -                   | 177                          | -                       | 77,805                 | 45,413           | 1,534           | 30,858            | -                                     |
| NATIONAL BUREAU OF STANDARDS.....      | -             | -               | -                   | -                            | -                       | 136                    | -                | 136             | -                 | -                                     |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 177           | -               | -                   | 177                          | -                       | -                      | -                | -               | -                 | -                                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 60,484        | 60,484          | -                   | -                            | -                       | 77,669                 | 45,413           | 1,398           | 30,858            | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 157,188       | 28,407          | 64,342              | 62,078                       | 2,361                   | 152,381                | 54,610           | 23,185          | 64,595            | 9,991                                 |
| DEPARTMENT OF THE ARMY.....            | 87,920        | 15,615          | 55,815              | 16,190                       | 300                     | 14,069                 | 5,756            | 7,595           | 465               | 233                                   |
| DEPARTMENT OF THE NAVY.....            | 23,918        | 6,973           | 7,345               | 8,920                        | 680                     | 73,619                 | 5,705            | 4,209           | 58,021            | 5,684                                 |
| DEPARTMENT OF THE AIR FORCE.....       | 38,456        | 1,870           | 818                 | 35,768                       | -                       | 35,091                 | 32,284           | 1,999           | -                 | 808                                   |
| DEFENSE AGENCIES.....                  | 6,166         | 3,585           | -                   | 1,200                        | 1,381                   | 29,602                 | 10,865           | 9,382           | 6,089             | 3,266                                 |
| DEPARTMENTWIDE FUNDS.....              | 728           | 364             | 364                 | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF ENERGY.....              | 114,117       | 80,654          | -                   | 6,372                        | 27,091                  | 100,419                | 15,531           | 33,362          | 13,968            | 37,538                                |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 2,356,818     | 917,595         | 847,308             | 507,485                      | 84,430                  | -                      | -                | -               | -                 | -                                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 101,223       | 64,444          | 14,602              | 3,806                        | 18,371                  | -                      | -                | -               | -                 | -                                     |
| CENTER FOR DISEASE CONTROL.....        | 63,075        | -               | -                   | 63,075                       | -                       | -                      | -                | -               | -                 | -                                     |
| FOOD AND DRUG ADMINISTRATION.....      | 49,147        | 38,924          | -                   | 10,223                       | -                       | -                      | -                | -               | -                 | -                                     |
| HEALTH SERVICES ADMINISTRATION.....    | 10,020        | -               | 4,850               | 4,870                        | 300                     | -                      | -                | -               | -                 | -                                     |
| HUMAN DEVELOPMENT SERVICES.....        | 18,849        | -               | 17,880              | 803                          | 166                     | -                      | -                | -               | -                 | -                                     |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,114,504     | 814,227         | 809,976             | 424,708                      | 65,593                  | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 34,723        | 34,533          | -                   | 105                          | 85                      | 172,865                | 4,891            | 147,281         | 15,371            | 5,322                                 |
| BUREAU OF LAND MANAGEMENT.....         | 1,025         | 1,025           | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| BUREAU OF MINES.....                   | -             | -               | -                   | -                            | -                       | 3,850                  | -                | 3,500           | -                 | 350                                   |
| BUREAU OF RECLAMATION.....             | 367           | 367             | -                   | -                            | -                       | 4,721                  | 4,500            | -               | 221               | -                                     |
| GEOLOGICAL SURVEY.....                 | -             | -               | -                   | -                            | -                       | 155,245                | -                | 140,125         | 15,120            | -                                     |
| NATIONAL PARK SERVICE.....             | 4,931         | 4,931           | -                   | -                            | -                       | 669                    | 1                | 396             | -                 | 272                                   |
| OFF OF SURF MINING RECLAM & ENFORCE..  | -             | -               | -                   | -                            | -                       | 2,700                  | -                | -               | -                 | 2,700                                 |
| OFFICE OF THE SECRETARY.....           | -             | -               | -                   | -                            | -                       | 1,000                  | -                | -               | -                 | 1,000                                 |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 3,400         | 3,210           | -                   | 105                          | 85                      | 4,680                  | 390              | 3,260           | 30                | 1,000                                 |
| US FISH AND WILDLIFE SERVICE.....      | 25,000        | 25,000          | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 600           | -               | -                   | 600                          | -                       | -                      | -                | -               | -                 | -                                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 600           | -               | -                   | 600                          | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF STATE, TOTAL.....        | 17,538        | 15,689          | 1,849               | -                            | -                       | 11,885                 | -                | 225             | -                 | 11,660                                |
| DEPARTMENTAL FUNDS.....                | -             | -               | -                   | -                            | -                       | 225                    | -                | 225             | -                 | -                                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 17,538        | 15,689          | 1,849               | -                            | -                       | 11,660                 | -                | -               | -                 | 11,660                                |
| DEPT OF TRANSPORTATION, TOTAL.....     | 2,406         | -               | 2,406               | -                            | -                       | 1,226                  | 640              | -               | 586               | -                                     |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..   | 2,406         | -               | 2,406               | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| RESEARCH & SPECIAL PROGRAM DIRECTRTE   | -             | -               | -                   | -                            | -                       | 640                    | 640              | -               | -                 | -                                     |
| US COAST GUARD.....                    | -             | -               | -                   | -                            | -                       | 586                    | -                | -               | 586               | -                                     |
| OTHER AGENCIES                         |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| CONSUMER PRODUCT SAFETY COMMISSION.... | 1,201         | -               | -                   | -                            | 1,201                   | -                      | -                | -               | -                 | -                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 86,733        | 81,000          | -                   | 5,733                        | -                       | 7,000                  | 2,600            | 2,900           | 1,500             | -                                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 37,601        | 12,595          | 1,400               | 21,956                       | 1,650                   | 344,181                | 164,749          | 74,508          | 22,464            | 82,460                                |
| NATIONAL SCIENCE FOUNDATION.....       | 134,120       | 132,943         | -                   | 1,120                        | 57                      | 221,080                | 76,411           | 69,703          | 74,873            | 93                                    |
| SMITHSONIAN INSTITUTION.....           | 13,291        | 13,291          | -                   | -                            | -                       | 2,621                  | 97               | 1,803           | 721               | -                                     |
| TENNESSEE VALLEY AUTHORITY.....        | 3,327         | 3,327           | -                   | -                            | -                       | 1,843                  | 1,843            | -               | -                 | -                                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.. | -             | -               | -                   | -                            | -                       | 200                    | -                | 200             | -                 | -                                     |
| VETERANS ADMINISTRATION.....           | 86,533        | 10,211          | 50,982              | 25,340                       | -                       | -                      | -                | -               | -                 | -                                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-23. FEDERAL OBLIGATIONS FOR RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |         |                 |                 |                                  |                         |
|---------------------------------------------|-------------|-------------------|--------------------|----------|---------|-----------------|-----------------|----------------------------------|-------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL   | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>MEC |
| TOTAL, ALL AGENCIES.....                    | 2,425,912   | 667,283           | 229,478            | 106,675  | 125,565 | 319,401         | 177,692         | 314,261                          | 485,557                 |
| DEPARTMENTS                                 |             |                   |                    |          |         |                 |                 |                                  |                         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 44,190      | -                 | -                  | 4,163    | 6,457   | 360             | 2,847           | -                                | 30,363                  |
| FOREST SERVICE.....                         | 10,519      | -                 | -                  | 915      | 2,721   | 145             | 1,517           | -                                | 5,221                   |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 33,671      | -                 | -                  | 3,248    | 3,736   | 215             | 1,330           | -                                | 25,142                  |
| COOPERATIVE RESEARCH.....                   | 4,363       | -                 | -                  | -        | -       | -               | -               | -                                | 4,363                   |
| FEDERAL RESEARCH.....                       | 29,308      | -                 | -                  | 3,248    | 3,736   | 215             | 1,330           | -                                | 20,779                  |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 23,852      | -                 | -                  | 492      | 5,497   | 4,098           | 1,389           | 2,410                            | 9,966                   |
| MARITIME ADMINISTRATION.....                | 3,537       | -                 | -                  | -        | 1,995   | 354             | 354             | -                                | 834                     |
| NATIONAL BUREAU OF STANDARDS.....           | 16,638      | -                 | -                  | 302      | 2,793   | 2,393           | 194             | 2,410                            | 8,546                   |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 1,682       | -                 | -                  | 190      | 63      | 151             | 841             | -                                | 437                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 795         | -                 | -                  | -        | 646     | -               | -               | -                                | 149                     |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 1,200       | -                 | -                  | -        | -       | 1,200           | -               | -                                | -                       |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,240,773   | 391,999           | 98,112             | 33,226   | 31,425  | 237,852         | 84,020          | 120,050                          | 244,089                 |
| DEPARTMENT OF THE ARMY.....                 | 199,189     | 30,403            | 1,438              | 10,781   | 16,379  | 70,527          | 22,328          | 21,940                           | 25,393                  |
| DEPARTMENT OF THE NAVY.....                 | 159,425     | 14,119            | 3,432              | 10,242   | 3,538   | 40,602          | 29,902          | 18,583                           | 38,987                  |
| DEPARTMENT OF THE AIR FORCE.....            | 709,882     | 334,058           | 79,382             | 9,943    | 7,189   | 54,323          | 22,391          | 56,624                           | 145,972                 |
| DEFENSE AGENCIES.....                       | 172,034     | 13,419            | 13,860             | 2,240    | 4,183   | 72,373          | 9,367           | 22,903                           | 33,689                  |
| DEPARTMENTWIDE FUNDS.....                   | 243         | -                 | -                  | -        | 136     | 27              | 32              | -                                | 68                      |
| DEPARTMENT OF ENERGY.....                   | 119,347     | -                 | -                  | 15,250   | 3,700   | 2,402           | 4,754           | 76,548                           | 16,693                  |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 37,054      | -                 | -                  | -        | -       | -               | 30,565          | -                                | 6,489                   |
| HUMAN DEVELOPMENT SERVICES.....             | 6,489       | -                 | -                  | -        | -       | -               | -               | -                                | 6,489                   |
| NATIONAL INSTITUTES OF HEALTH.....          | 30,565      | -                 | -                  | -        | -       | -               | 30,565          | -                                | -                       |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 3,775       | -                 | -                  | -        | -       | -               | -               | -                                | 3,775                   |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 56,022      | -                 | -                  | 6,355    | 8,881   | 1,115           | 7,612           | 30,735                           | 1,324                   |
| BUREAU OF MINES.....                        | 44,022      | -                 | -                  | 6,150    | 2,100   | 800             | 4,100           | 30,672                           | 200                     |
| BUREAU OF RECLAMATION.....                  | 1,965       | -                 | -                  | 5        | 1,686   | 140             | 122             | -                                | 12                      |
| GEOLOGICAL SURVEY.....                      | 2,275       | -                 | -                  | -        | 1,930   | 50              | 295             | -                                | -                       |
| OFFICE OF THE SECRETARY.....                | 3,480       | -                 | -                  | -        | 280     | 105             | 3,095           | -                                | -                       |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 4,280       | -                 | -                  | 200      | 2,685   | 20              | -               | 63                               | 1,112                   |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 1,048       | -                 | 51                 | -        | -       | 997             | -               | -                                | -                       |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 900         | -                 | -                  | -        | -       | 900             | -               | -                                | -                       |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 148         | -                 | 51                 | -        | -       | 97              | -               | -                                | -                       |
| DEPT OF TRANSPORTATION, TOTAL.....          | 46,870      | 2,435             | 305                | -        | 34,535  | 1,460           | 6,118           | 320                              | 1,697                   |
| FEDERAL AVIATION ADMINISTRATION.....        | 4,700       | 675               | 305                | -        | 3,070   | 650             | -               | -                                | -                       |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 5,300       | -                 | -                  | -        | 4,915   | -               | -               | 320                              | 65                      |
| FEDERAL RAILROAD ADMINISTRATION.....        | 6,568       | -                 | -                  | -        | 2,460   | 556             | 1,920           | -                                | 1,632                   |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 23,839      | -                 | -                  | -        | 20,103  | -               | 3,736           | -                                | -                       |
| OFFICE OF THE SECRETARY.....                | 3,402       | 1,760             | -                  | -        | 1,642   | -               | -               | -                                | -                       |
| US COAST GUARD.....                         | 2,061       | -                 | -                  | -        | 1,345   | 254             | 462             | -                                | -                       |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,000       | -                 | -                  | -        | 1,000   | -               | -               | -                                | -                       |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 544         | -                 | -                  | -        | -       | -               | -               | 476                              | 68                      |
| BUREAU OF ENGRAVING AND PRINTING.....       | 544         | -                 | -                  | -        | -       | -               | -               | 476                              | 68                      |
| OTHER AGENCIES                              |             |                   |                    |          |         |                 |                 |                                  |                         |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 2,030       | -                 | -                  | -        | -       | -               | -               | -                                | 2,030                   |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 65,715      | -                 | -                  | 25,212   | 24,890  | 7,814           | 7,799           | -                                | -                       |
| FEDERAL COMMUNICATIONS COMMISSION.....      | 1,053       | -                 | -                  | -        | -       | 1,053           | -               | -                                | -                       |
| GENERAL SERVICES ADMINISTRATION.....        | 298         | -                 | -                  | -        | 216     | 6               | -               | -                                | 76                      |
| INTERNATIONAL COMMUNICATION AGENCY.....     | 71          | -                 | -                  | -        | -       | 71              | -               | -                                | -                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 566,123     | 272,141           | 130,985            | 11,744   | 1,716   | 40,486          | 22,873          | 64,458                           | 21,720                  |
| NATIONAL SCIENCE FOUNDATION.....            | 86,135      | 708               | -                  | 10,059   | 8,248   | 20,144          | 7,390           | 19,264                           | 20,322                  |
| NUCLEAR REGULATORY COMMISSION.....          | 112,291     | -                 | -                  | -        | -       | -               | -               | -                                | 112,291                 |
| TENNESSEE VALLEY AUTHORITY.....             | 15,269      | -                 | -                  | 174      | -       | 361             | 130             | -                                | 14,604                  |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | 751         | -                 | 25                 | -        | -       | -               | -               | -                                | 50                      |
| VETERANS ADMINISTRATION.....                | 3,377       | -                 | -                  | -        | -       | 1,182           | 2,195           | -                                | -                       |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-24. FEDERAL OBLIGATIONS FOR RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978  
(ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |         |                 |                 |                                  |                          |
|---------------------------------------------|-------------|-------------------|--------------------|----------|---------|-----------------|-----------------|----------------------------------|--------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL   | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>GEN. |
| TOTAL, ALL AGENCIES.....                    | 2,664,995   | 728,113           | 235,528            | 116,896  | 133,057 | 370,901         | 172,754         | 340,325                          | 567,421                  |
| DEPARTMENTS                                 |             |                   |                    |          |         |                 |                 |                                  |                          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 49,820      | -                 | -                  | 4,640    | 7,203   | 366             | 3,284           | -                                | 34,327                   |
| FOREST SERVICE.....                         | 12,468      | -                 | -                  | 1,085    | 3,225   | 172             | 1,799           | -                                | 6,187                    |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 37,352      | -                 | -                  | 3,555    | 3,978   | 194             | 1,485           | -                                | 28,140                   |
| COOPERATIVE RESEARCH.....                   | 4,876       | -                 | -                  | -        | -       | -               | -               | -                                | 4,876                    |
| FEDERAL RESEARCH.....                       | 32,476      | -                 | -                  | 3,555    | 3,978   | 194             | 1,485           | -                                | 23,264                   |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 24,021      | -                 | -                  | 536      | 5,752   | 4,099           | 1,405           | 2,395                            | 9,834                    |
| MARITIME ADMINISTRATION.....                | 4,110       | -                 | -                  | -        | 2,277   | 411             | 411             | -                                | 1,011                    |
| NATIONAL BUREAU OF STANDARDS.....           | 16,594      | -                 | -                  | 331      | 2,827   | 2,625           | 127             | 2,395                            | 8,289                    |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 1,775       | -                 | -                  | 205      | 68      | 163             | 867             | -                                | 472                      |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 642         | -                 | -                  | -        | 580     | -               | -               | -                                | 62                       |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 900         | -                 | -                  | -        | -       | 900             | -               | -                                | -                        |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,299,464   | 401,648           | 100,529            | 35,682   | 29,699  | 283,887         | 104,643         | 115,843                          | 227,533                  |
| DEPARTMENT OF THE ARMY.....                 | 184,087     | 28,632            | 1,083              | 12,859   | 13,081  | 76,669          | 24,982          | 15,171                           | 11,610                   |
| DEPARTMENT OF THE NAVY.....                 | 170,317     | 16,204            | 3,520              | 9,858    | 3,584   | 44,110          | 34,205          | 21,465                           | 37,271                   |
| DEPARTMENT OF THE AIR FORCE.....            | 733,435     | 344,195           | 81,803             | 10,359   | 7,381   | 56,663          | 23,611          | 59,478                           | 149,945                  |
| DEFENSE AGENCIES.....                       | 210,314     | 12,617            | 14,123             | 2,606    | 4,863   | 106,307         | 21,638          | 19,729                           | 28,431                   |
| DEPARTMENTWIDE FUNDS.....                   | 1,311       | -                 | -                  | -        | 690     | 138             | 207             | -                                | 276                      |
| DEPARTMENT OF ENERGY.....                   | 135,947     | -                 | -                  | 15,502   | 2,100   | 1,283           | 655             | 81,771                           | 34,636                   |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 41,551      | -                 | -                  | -        | -       | -               | -               | -                                | 41,551                   |
| HUMAN DEVELOPMENT SERVICES.....             | 7,078       | -                 | -                  | -        | -       | -               | -               | -                                | 7,078                    |
| NATIONAL INSTITUTES OF HEALTH.....          | 34,473      | -                 | -                  | -        | -       | -               | -               | -                                | 34,473                   |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 4,796       | -                 | -                  | -        | -       | -               | -               | -                                | 4,796                    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 61,766      | -                 | -                  | 6,570    | 10,748  | 1,205           | 6,208           | 35,370                           | 1,663                    |
| BUREAU OF MINES.....                        | 49,350      | -                 | -                  | 6,350    | 2,050   | 850             | 4,500           | 35,300                           | 300                      |
| BUREAU OF RECLAMATION.....                  | 2,062       | -                 | -                  | 5        | 1,609   | 160             | 275             | -                                | 13                       |
| GEOLOGICAL SURVEY.....                      | 2,944       | -                 | -                  | -        | 2,569   | 75              | 300             | -                                | -                        |
| OFFICE OF THE SECRETARY.....                | 1,433       | -                 | -                  | -        | 200     | 100             | 1,133           | -                                | -                        |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 5,975       | -                 | -                  | 215      | 4,320   | 20              | -               | 70                               | 1,350                    |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 2,747       | -                 | -                  | -        | -       | 2,304           | -               | -                                | 443                      |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 2,000       | -                 | -                  | -        | -       | 2,000           | -               | -                                | -                        |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 304         | -                 | -                  | -        | -       | 304             | -               | -                                | -                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 443         | -                 | -                  | -        | -       | -               | -               | -                                | 443                      |
| DEPARTMENT OF STATE, TOTAL.....             | 550         | -                 | -                  | -        | -       | -               | 550             | -                                | -                        |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 550         | -                 | -                  | -        | -       | -               | 550             | -                                | -                        |
| DEPT OF TRANSPORTATION, TOTAL.....          | 52,715      | 3,432             | 500                | -        | 37,916  | 1,886           | 6,548           | 315                              | 2,118                    |
| FEDERAL AVIATION ADMINISTRATION.....        | 7,700       | 1,105             | 500                | -        | 5,030   | 1,065           | -               | -                                | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 5,200       | -                 | -                  | -        | 4,820   | -               | -               | 315                              | 65                       |
| FEDERAL RAILROAD ADMINISTRATION.....        | 8,262       | -                 | -                  | -        | 3,095   | 699             | 2,415           | -                                | 2,053                    |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 24,966      | -                 | -                  | -        | 21,054  | -               | 3,912           | -                                | -                        |
| OFFICE OF THE SECRETARY.....                | 4,498       | 2,327             | -                  | -        | 2,171   | -               | -               | -                                | -                        |
| US COAST GUARD.....                         | 989         | -                 | -                  | -        | 646     | 122             | 221             | -                                | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,100       | -                 | -                  | -        | 1,100   | -               | -               | -                                | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 576         | -                 | -                  | -        | -       | -               | -               | 504                              | 72                       |
| BUREAU OF ENGRAVING AND PRINTING.....       | 576         | -                 | -                  | -        | -       | -               | -               | 504                              | 72                       |
| OTHER AGENCIES                              |             |                   |                    |          |         |                 |                 |                                  |                          |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 437         | -                 | -                  | -        | -       | -               | -               | -                                | 437                      |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 73,005      | -                 | -                  | 29,200   | 28,705  | 7,300           | 7,800           | -                                | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....      | 1,363       | -                 | -                  | -        | -       | 1,363           | -               | -                                | -                        |
| GENERAL SERVICES ADMINISTRATION.....        | 1,627       | -                 | -                  | 1,300    | 172     | 105             | -               | -                                | 50                       |
| INTERNATIONAL COMMUNICATION AGENCY.....     | 141         | -                 | -                  | -        | -       | 141             | -               | -                                | -                        |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 656,749     | 322,252           | 134,499            | 11,661   | 2,003   | 41,611          | 30,811          | 83,900                           | 30,012                   |
| NATIONAL SCIENCE FOUNDATION.....            | 99,333      | 781               | -                  | 11,496   | 8,709   | 21,949          | 8,113           | 20,227                           | 28,058                   |
| NUCLEAR REGULATORY COMMISSION.....          | 132,139     | -                 | -                  | -        | -       | -               | -               | -                                | 132,139                  |
| TENNESSEE VALLEY AUTHORITY.....             | 22,272      | -                 | -                  | 309      | -       | 1,990           | 319             | -                                | 19,654                   |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | 250         | -                 | -                  | -        | 50      | 110             | -               | -                                | 98                       |
| VETERANS ADMINISTRATION.....                | 3,720       | -                 | -                  | -        | -       | 1,302           | 2,418           | -                                | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-25. FEDERAL OBLIGATIONS FOR RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |         |                 |                 |                                  |                          |
|---------------------------------------------|-------------|-------------------|--------------------|----------|---------|-----------------|-----------------|----------------------------------|--------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL   | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>GEN. |
| TOTAL, ALL AGENCIES.....                    | 2,791,251   | 774,994           | 246,159            | 105,591  | 136,021 | 414,043         | 177,968         | 322,112                          | 614,343                  |
| DEPARTMENTS                                 |             |                   |                    |          |         |                 |                 |                                  |                          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 49,074      | -                 | -                  | 4,599    | 7,335   | 408             | 3,209           | -                                | 33,523                   |
| FOREST SERVICE.....                         | 12,040      | -                 | -                  | 1,048    | 3,115   | 166             | 1,736           | -                                | 5,975                    |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 37,034      | -                 | -                  | 3,551    | 4,220   | 242             | 1,473           | -                                | 27,548                   |
| COOPERATIVE RESEARCH.....                   | 4,374       | -                 | -                  | -        | -       | -               | -               | -                                | 4,374                    |
| FEDERAL RESEARCH.....                       | 32,660      | -                 | -                  | 3,551    | 4,220   | 242             | 1,473           | -                                | 23,174                   |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 25,027      | -                 | -                  | 616      | 5,548   | 4,501           | 1,423           | 2,462                            | 10,477                   |
| MARITIME ADMINISTRATION.....                | 3,450       | -                 | -                  | -        | 1,935   | 345             | 345             | -                                | 825                      |
| NATIONAL BUREAU OF STANDARDS.....           | 17,675      | -                 | -                  | 364      | 2,892   | 2,753           | 132             | 2,462                            | 9,072                    |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 2,062       | -                 | -                  | 252      | 84      | 200             | 946             | -                                | 580                      |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 740         | -                 | -                  | -        | 637     | 103             | -               | -                                | -                        |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 1,100       | -                 | -                  | -        | -       | 1,100           | -               | -                                | -                        |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,343,529   | 420,289           | 97,162             | 30,294   | 31,194  | 314,381         | 99,761          | 120,208                          | 230,240                  |
| DEPARTMENT OF THE ARMY.....                 | 203,115     | 31,650            | 780                | 8,656    | 13,283  | 96,768          | 23,880          | 14,419                           | 13,679                   |
| DEPARTMENT OF THE NAVY.....                 | 186,826     | 17,629            | 2,954              | 10,722   | 3,953   | 49,458          | 36,910          | 22,807                           | 42,393                   |
| DEPARTMENT OF THE AIR FORCE.....            | 747,239     | 349,796           | 83,144             | 10,633   | 7,477   | 58,227          | 24,497          | 61,498                           | 151,967                  |
| DEFENSE AGENCIES.....                       | 205,361     | 21,214            | 10,284             | 283      | 5,961   | 109,824         | 14,318          | 21,484                           | 21,993                   |
| DEPARTMENTWIDE FUNDS.....                   | 988         | -                 | -                  | -        | 520     | 104             | 156             | -                                | 208                      |
| DEPARTMENT OF ENERGY.....                   | 162,718     | -                 | -                  | 8,853    | 2,473   | 7,053           | 12,083          | 89,836                           | 42,420                   |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 42,254      | -                 | -                  | -        | -       | -               | -               | -                                | 42,254                   |
| HUMAN DEVELOPMENT SERVICES.....             | 7,078       | -                 | -                  | -        | -       | -               | -               | -                                | 7,078                    |
| NATIONAL INSTITUTES OF HEALTH.....          | 35,176      | -                 | -                  | -        | -       | -               | -               | -                                | 35,176                   |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 3,905       | -                 | -                  | -        | -       | -               | -               | -                                | 3,905                    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 57,565      | -                 | -                  | 6,585    | 8,272   | 986             | 3,994           | 35,955                           | 1,773                    |
| BUREAU OF MINES.....                        | 45,300      | -                 | -                  | 6,300    | 350     | 300             | 2,200           | 35,850                           | 300                      |
| BUREAU OF RECLAMATION.....                  | 1,024       | -                 | -                  | -        | 305     | 431             | 275             | -                                | 13                       |
| GEOLOGICAL SURVEY.....                      | 3,082       | -                 | -                  | -        | 2,607   | 125             | 350             | -                                | -                        |
| OFFICE OF THE SECRETARY.....                | 1,479       | -                 | -                  | -        | 210     | 100             | 1,169           | -                                | -                        |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 6,680       | -                 | -                  | 285      | 4,800   | 30              | -               | 105                              | 1,460                    |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 1,500       | -                 | -                  | -        | -       | 1,000           | -               | -                                | 500                      |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 900         | -                 | -                  | -        | -       | 900             | -               | -                                | -                        |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 100         | -                 | -                  | -        | -       | 100             | -               | -                                | -                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 500         | -                 | -                  | -        | -       | -               | -               | -                                | 500                      |
| DEPT OF TRANSPORTATION, TOTAL.....          | 53,574      | 1,060             | 480                | -        | 40,546  | 1,964           | 7,429           | 345                              | 1,750                    |
| FEDERAL AVIATION ADMINISTRATION.....        | 7,400       | 1,060             | 480                | -        | 4,835   | 1,025           | -               | -                                | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 5,700       | -                 | -                  | -        | 5,285   | -               | -               | 345                              | 70                       |
| FEDERAL RAILROAD ADMINISTRATION.....        | 6,765       | -                 | -                  | -        | 2,534   | 573             | 1,978           | -                                | 1,680                    |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 26,867      | -                 | -                  | -        | 22,656  | -               | 4,211           | -                                | -                        |
| OFFICE OF THE SECRETARY.....                | 1,274       | -                 | -                  | -        | 1,274   | -               | -               | -                                | -                        |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE..... | 1,400       | -                 | -                  | -        | 825     | -               | 575             | -                                | -                        |
| US COAST GUARD.....                         | 2,968       | -                 | -                  | -        | 1,937   | 366             | 665             | -                                | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,200       | -                 | -                  | -        | 1,200   | -               | -               | -                                | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 672         | -                 | -                  | -        | -       | -               | -               | 588                              | 84                       |
| BUREAU OF ENGRAVING AND PRINTING.....       | 672         | -                 | -                  | -        | -       | -               | -               | 588                              | 84                       |
| OTHER AGENCIES                              |             |                   |                    |          |         |                 |                 |                                  |                          |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 508         | -                 | -                  | -        | -       | -               | -               | -                                | 508                      |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 73,000      | -                 | -                  | 29,200   | 28,700  | 7,300           | 7,800           | -                                | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....      | 1,485       | -                 | -                  | -        | -       | 1,485           | -               | -                                | -                        |
| GENERAL SERVICES ADMINISTRATION.....        | 332         | -                 | -                  | -        | 182     | 100             | -               | -                                | 50                       |
| INTERNATIONAL COMMUNICATION AGENCY.....     | 100         | -                 | -                  | -        | -       | 100             | -               | -                                | -                        |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 672,956     | 352,799           | 148,517            | 11,913   | 1,827   | 43,525          | 30,720          | 50,790                           | 32,865                   |
| NATIONAL SCIENCE FOUNDATION.....            | 109,624     | 846               | -                  | 12,038   | 9,944   | 23,836          | 8,801           | 21,928                           | 32,231                   |
| NUCLEAR REGULATORY COMMISSION.....          | 155,030     | -                 | -                  | -        | -       | -               | -               | -                                | 155,030                  |
| TENNESSEE VALLEY AUTHORITY.....             | 34,614      | -                 | -                  | 1,458    | -       | 6,072           | 356             | -                                | 26,728                   |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | 104         | -                 | -                  | 35       | -       | 44              | -               | -                                | 25                       |
| VETERANS ADMINISTRATION.....                | 3,680       | -                 | -                  | -        | -       | 1,288           | 2,392           | -                                | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-26. FEDERAL OBLIGATIONS FOR RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 176,337                           | 93,241           | 78,472               | 4,624                                                    | 443,342         | 12,379            | 143,394        | 8,479                     | 52,169         | 226,921                   |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 3,845                             | 3,845            | -                    | -                                                        | 64,186          | -                 | 60,016         | -                         | 3,531          | 639                       |
| ECON, STAT & COOPERATIVES SERVICE...   | 1,438                             | 1,438            | -                    | -                                                        | 28,229          | -                 | 26,655         | -                         | 997            | 577                       |
| FOREST SERVICE.....                    | 1,316                             | 1,316            | -                    | -                                                        | 5,793           | -                 | 4,773          | -                         | 1,020          | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 1,091                             | 1,091            | -                    | -                                                        | 30,164          | -                 | 28,588         | -                         | 1,514          | 62                        |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 28,295          | -                 | 26,797         | -                         | 1,498          | -                         |
| FEDERAL RESEARCH.....                  | 1,091                             | 1,091            | -                    | -                                                        | 1,869           | -                 | 1,791          | -                         | 16             | 62                        |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 4,903                             | 1,994            | 2,909                | -                                                        | 7,026           | -                 | 6,810          | -                         | 216            | -                         |
| BUREAU OF THE CENSUS.....              | 1,293                             | 1,105            | 188                  | -                                                        | 475             | -                 | 259            | -                         | 216            | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION    | -                                 | -                | -                    | -                                                        | 2,500           | -                 | 2,500          | -                         | -              | -                         |
| MARITIME ADMINISTRATION.....           | -                                 | -                | -                    | -                                                        | 163             | -                 | 163            | -                         | -              | -                         |
| NATIONAL BUREAU OF STANDARDS.....      | 3,507                             | 786              | 2,721                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 103                               | 103              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | -                                 | -                | -                    | -                                                        | 3,073           | -                 | 3,073          | -                         | -              | -                         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | -                                 | -                | -                    | -                                                        | 100             | -                 | 100            | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | -                                 | -                | -                    | -                                                        | 715             | -                 | 715            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 76,197                            | 25,790           | 46,612               | 3,795                                                    | 25,584          | -                 | 257            | 1,404                     | 1,911          | 22,012                    |
| DEPARTMENT OF THE ARMY.....            | 9,430                             | 8,128            | 1,302                | -                                                        | 22,793          | -                 | 138            | -                         | 643            | 22,012                    |
| DEPARTMENT OF THE NAVY.....            | 31,460                            | 9,074            | 21,830               | 556                                                      | 1,253           | -                 | -              | -                         | 1,253          | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 8,518                             | 6,856            | 1,662                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 26,632                            | 1,629            | 21,764               | 3,239                                                    | 1,263           | -                 | 41             | 1,222                     | -              | -                         |
| DEPARTMENTWIDE FUNDS.....              | 157                               | 103              | 54                   | -                                                        | 275             | -                 | 78             | 102                       | 15             | -                         |
| DEPARTMENT OF ENERGY.....              | 4,839                             | 4,445            | 2,394                | -                                                        | 2,686           | -                 | 1,551          | -                         | 135            | 1,000                     |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 8,372                             | 7,889            | 483                  | -                                                        | 187,265         | 2,040             | 15,324         | 263                       | 24,391         | 145,247                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH    | 1,936                             | 1,636            | 300                  | -                                                        | 20,827          | 2,040             | 236            | 243                       | 15,655         | 2,653                     |
| HEALTH CARE FINANCING ADMINISTRATION   | -                                 | -                | -                    | -                                                        | 29,998          | -                 | -              | -                         | -              | 29,998                    |
| HEALTH RESOURCES ADMINISTRATION.....   | -                                 | -                | -                    | -                                                        | 7,410           | -                 | -              | -                         | -              | 7,410                     |
| HUMAN DEVELOPMENT SERVICES.....        | 183                               | -                | 183                  | -                                                        | 23,776          | -                 | 159            | -                         | 1,700          | 21,917                    |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 27,120          | -                 | -              | -                         | -              | 27,120                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 6,253                             | 6,253            | -                    | -                                                        | 6,871           | -                 | -              | -                         | -              | 6,871                     |
| OFFICE OF EDUCATION.....               | -                                 | -                | -                    | -                                                        | 11,892          | -                 | -              | -                         | -              | 11,892                    |
| OFFICE OF ASS'T SECTY FOR EDUCATION    | -                                 | -                | -                    | -                                                        | 1,037           | -                 | -              | -                         | -              | 1,037                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | -                                 | -                | -                    | -                                                        | 27,117          | -                 | 929            | 20                        | 1,036          | 25,132                    |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 20,000          | -                 | 14,000         | -                         | 6,000          | -                         |
| SOCIAL SECURITY ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 11,217          | -                 | -              | -                         | -              | 11,217                    |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | -                                 | -                | -                    | -                                                        | 28,945          | -                 | 14,890         | -                         | -              | 14,055                    |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 3,367                             | 1,877            | 1,383                | 107                                                      | 4,926           | 2,610             | 912            | 588                       | 469            | 347                       |
| BUREAU OF LAND MANAGEMENT.....         | -                                 | -                | -                    | -                                                        | 52              | 10                | -              | -                         | 42             | -                         |
| BUREAU OF MINES.....                   | 1,650                             | 1,650            | -                    | -                                                        | 100             | -                 | 100            | -                         | -              | -                         |
| BUREAU OF RECLAMATION.....             | -                                 | -                | -                    | -                                                        | 284             | -                 | 194            | -                         | 90             | -                         |
| GEOLOGICAL SURVEY.....                 | 1,610                             | 227              | 1,383                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| HERITAGE CONSERVATION & REC SERVICE    | -                                 | -                | -                    | -                                                        | 20              | -                 | -              | -                         | -              | 20                        |
| NATIONAL PARK SERVICE.....             | -                                 | -                | -                    | -                                                        | 2,897           | 2,586             | 14             | -                         | 133            | 164                       |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 107                               | -                | -                    | 107                                                      | 1,573           | 14                | 604            | 588                       | 204            | 163                       |
| DEPARTMENT OF JUSTICE, TOTAL.....      | -                                 | -                | -                    | -                                                        | 15,215          | -                 | 830            | -                         | 11,797         | 2,588                     |
| BUREAU OF PRISONS.....                 | -                                 | -                | -                    | -                                                        | 136             | -                 | 7              | -                         | 47             | 82                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | -                                 | -                | -                    | -                                                        | 15,079          | -                 | 823            | -                         | 11,750         | 2,506                     |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 18,455          | -                 | 17,798         | -                         | 657            | -                         |
| BUREAU OF LABOR STATISTICS.....        | -                                 | -                | -                    | -                                                        | 896             | -                 | 896            | -                         | -              | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 6,121           | -                 | 5,464          | -                         | 657            | -                         |
| EMPLOYMENT STANDARDS ADMINISTRATION    | -                                 | -                | -                    | -                                                        | 4,446           | -                 | 4,446          | -                         | -              | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | -                                 | -                | -                    | -                                                        | 3,306           | -                 | 3,306          | -                         | -              | -                         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | -                                 | -                | -                    | -                                                        | 3,441           | -                 | 3,441          | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 245             | -                 | 245            | -                         | -              | -                         |
| DEPARTMENT OF STATE, TOTAL.....        | -                                 | -                | -                    | -                                                        | 8,448           | -                 | 2,226          | 1,723                     | 3,281          | 1,218                     |
| DEPARTMENTAL FUNDS.....                | -                                 | -                | -                    | -                                                        | 1,723           | -                 | -              | 1,723                     | -              | -                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | -                                 | -                | -                    | -                                                        | 6,725           | -                 | 2,226          | -                         | 3,281          | 1,218                     |

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TABLE C-26. FEDERAL OBLIGATIONS FOR RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>SEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>SEC |
| DEPT OF TRANSPORTATION, TOTAL.....      | 1,327                             | 260              | 405                  | 662                                                      | 942             | -                 | 840            | 102                       | -              | -                         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 25                                | -                | 25                   | -                                                        | 7               | -                 | 7              | -                         | -              | -                         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 1,302                             | 260              | 380                  | 662                                                      | 224             | -                 | 224            | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                        | 679             | -                 | 577            | 102                       | -              | -                         |
| US COAST GUARD.....                     | -                                 | -                | -                    | -                                                        | 32              | -                 | 32             | -                         | -              | -                         |
| OTHER AGENCIES                          |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| ACTION.....                             | -                                 | -                | -                    | -                                                        | 100             | -                 | 49             | -                         | 51             | -                         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | -                                 | -                | -                    | -                                                        | 1,526           | -                 | 763            | 763                       | -              | -                         |
| APPALACHIAN REGIONAL COMMISSION.....    | -                                 | -                | -                    | -                                                        | 562             | -                 | 562            | -                         | -              | -                         |
| CIVIL AERONAUTICS BOARD.....            | -                                 | -                | -                    | -                                                        | 535             | -                 | 535            | -                         | -              | -                         |
| COMMUNITY SERVICES ADMINISTRATION.....  | -                                 | -                | -                    | -                                                        | 1,000           | -                 | -              | -                         | 1,000          | -                         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | -                                 | -                | -                    | -                                                        | 257             | -                 | -              | -                         | -              | 257                       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 3,100                             | 2,370            | 730                  | -                                                        | 3,315           | -                 | 2,395          | -                         | 920            | -                         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 60                                | -                | -                    | 60                                                       | 930             | -                 | 930            | -                         | -              | -                         |
| FEDERAL HOME LOAN BANK BOARD.....       | -                                 | -                | -                    | -                                                        | 1,665           | -                 | 1,665          | -                         | -              | -                         |
| FEDERAL TRADE COMMISSION.....           | -                                 | -                | -                    | -                                                        | 1,111           | -                 | 1,111          | -                         | -              | -                         |
| GENERAL SERVICES ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 50              | -                 | 50             | -                         | -              | -                         |
| INTERSTATE COMMERCE COMMISSION.....     | 42                                | 42               | -                    | -                                                        | 22              | -                 | 22             | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 25,917                            | 22,780           | 3,137                | -                                                        | 615             | -                 | 539            | 30                        | -              | 46                        |
| NATIONAL SCIENCE FOUNDATION.....        | 42,264                            | 21,873           | 20,391               | -                                                        | 54,016          | 3,924             | 10,204         | 2,468                     | 3,810          | 33,610                    |
| SMALL BUSINESS ADMINISTRATION.....      | -                                 | -                | -                    | -                                                        | 466             | -                 | 466            | -                         | -              | -                         |
| SMITHSONIAN INSTITUTION.....            | -                                 | -                | -                    | -                                                        | 9,707           | 3,805             | -              | -                         | -              | 5,902                     |
| US ARMS CONTROL & DISARMAMENT AGENCY... | 104                               | 76               | 28                   | -                                                        | 1,138           | -                 | -              | 1,138                     | -              | -                         |
| US INTERNATIONAL TRADE COMMISSION.....  | -                                 | -                | -                    | -                                                        | 2,649           | -                 | 2,649          | -                         | -              | -                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-27. FEDERAL OBLIGATIONS FOR RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1970 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 197,932                           | 100,852          | 86,765               | 8,315                                                    | 530,038         | 16,550            | 170,919        | 11,076                    | 81,419         | 250,074                   |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 4,282                             | 4,282            | -                    | -                                                        | 73,111          | -                 | 68,372         | -                         | 4,026          | 715                       |
| ECON. STAT & COOPERATIVES SERVICE....  | 1,507                             | 1,507            | -                    | -                                                        | 32,392          | -                 | 30,625         | -                         | 1,119          | 648                       |
| FOREST SERVICE.....                    | 1,560                             | 1,560            | -                    | -                                                        | 6,868           | -                 | 5,659          | -                         | 1,209          | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 1,215                             | 1,215            | -                    | -                                                        | 33,851          | -                 | 32,088         | -                         | 1,696          | 67                        |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 31,809          | -                 | 30,129         | -                         | 1,680          | -                         |
| FEDERAL RESEARCH.....                  | 1,215                             | 1,215            | -                    | -                                                        | 2,042           | -                 | 1,959          | -                         | 16             | 67                        |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 5,399                             | 2,211            | 3,188                | -                                                        | 11,096          | -                 | 10,878         | -                         | 218            | -                         |
| BUREAU OF THE CENSUS.....              | 1,438                             | 1,237            | 201                  | -                                                        | 479             | -                 | 261            | -                         | 218            | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | -                                 | -                | -                    | -                                                        | 5,500           | -                 | 5,500          | -                         | -              | -                         |
| MARITIME ADMINISTRATION.....           | -                                 | -                | -                    | -                                                        | 290             | -                 | 290            | -                         | -              | -                         |
| NATIONAL BUREAU OF STANDARDS.....      | 3,850                             | 863              | 2,987                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 111                               | 111              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL OCEANIC AND ATMOS ADMIN....   | -                                 | -                | -                    | -                                                        | 3,927           | -                 | 3,927          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP.... | -                                 | -                | -                    | -                                                        | 900             | -                 | 900            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 88,747                            | 26,178           | 55,270               | 7,299                                                    | 24,928          | -                 | 1,138          | 2,388                     | 2,089          | 19,313                    |
| DEPARTMENT OF THE ARMY.....            | 14,414                            | 6,293            | 8,121                | -                                                        | 20,719          | -                 | 724            | -                         | 682            | 19,313                    |
| DEPARTMENT OF THE NAVY.....            | 32,144                            | 9,818            | 21,718               | 608                                                      | 1,338           | -                 | -              | -                         | 1,338          | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 9,180                             | 7,382            | 1,778                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 32,201                            | 2,133            | 23,377               | 6,691                                                    | 1,422           | -                 | -              | 1,422                     | -              | -                         |
| DEPARTMENT-WIDE FUNDS.....             | 828                               | 552              | 276                  | -                                                        | 1,449           | -                 | 414            | 966                       | 69             | -                         |
| DEPARTMENT OF ENERGY.....              | 7,969                             | 4,823            | 3,146                | -                                                        | 2,575           | -                 | 985            | -                         | 1,090          | 500                       |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 9,231                             | 9,031            | 200                  | -                                                        | 220,419         | 2,938             | 22,632         | 554                       | 28,512         | 165,783                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 1,956                             | 1,956            | -                    | -                                                        | 22,343          | 2,938             | 261            | 254                       | 16,461         | 2,429                     |
| HEALTH CARE FINANCING ADMINISTRATION.. | -                                 | -                | -                    | -                                                        | 35,065          | -                 | -              | -                         | -              | 35,065                    |
| HEALTH RESOURCES ADMINISTRATION.....   | -                                 | -                | -                    | -                                                        | 5,000           | -                 | -              | -                         | -              | 5,000                     |
| HUMAN DEVELOPMENT SERVICES.....        | 200                               | -                | 200                  | -                                                        | 23,622          | -                 | 173            | -                         | 1,854          | 21,595                    |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 37,000          | -                 | -              | -                         | -              | 37,000                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 7,075                             | 7,075            | -                    | -                                                        | 7,747           | -                 | -              | -                         | -              | 7,747                     |
| OFFICE OF EDUCATION.....               | -                                 | -                | -                    | -                                                        | 14,255          | -                 | -              | -                         | -              | 14,255                    |
| OFFICE OF ASS'T SECY FOR EDUCATION..   | -                                 | -                | -                    | -                                                        | 1,042           | -                 | -              | -                         | -              | 1,042                     |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | -                                 | -                | -                    | -                                                        | 31,293          | -                 | 1,198          | 300                       | 1,197          | 28,598                    |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 30,000          | -                 | 21,000         | -                         | 9,000          | -                         |
| SOCIAL SECURITY ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 13,052          | -                 | -              | -                         | -              | 13,052                    |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | -                                 | -                | -                    | -                                                        | 33,304          | -                 | 15,858         | -                         | -              | 17,446                    |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 4,730                             | 2,649            | 1,956                | 125                                                      | 6,220           | 3,409             | 1,029          | 765                       | 565            | 452                       |
| BUREAU OF LAND MANAGEMENT.....         | -                                 | -                | -                    | -                                                        | 32              | -                 | -              | -                         | 32             | -                         |
| BUREAU OF MINES.....                   | 2,350                             | 2,350            | -                    | -                                                        | 115             | -                 | 115            | -                         | -              | -                         |
| BUREAU OF RECLAMATION.....             | -                                 | -                | -                    | -                                                        | 221             | -                 | 152            | -                         | 69             | -                         |
| GEOLOGICAL SURVEY.....                 | 2,244                             | 299              | 1,945                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL PARK SERVICE.....             | -                                 | -                | -                    | -                                                        | 3,787           | 3,394             | 171            | -                         | 169            | 207                       |
| OFFICE OF THE SECRETARY.....           | 11                                | -                | 11                   | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 125                               | -                | -                    | 125                                                      | 2,065           | 15                | 745            | 765                       | 295            | 245                       |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 75                                | 75               | -                    | -                                                        | 39,796          | -                 | 361            | -                         | 29,515         | 9,920                     |
| BUREAU OF PRISONS.....                 | -                                 | -                | -                    | -                                                        | 746             | -                 | 821            | -                         | 148            | 516                       |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | 75                                | 75               | -                    | -                                                        | 37,050          | -                 | 279            | -                         | 29,367         | 7,404                     |
| OFFICE OF THE ATTORNEY GENERAL.....    | -                                 | -                | -                    | -                                                        | 2,000           | -                 | -              | -                         | -              | 2,000                     |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 19,424          | -                 | 18,845         | -                         | 579            | -                         |
| BUREAU OF LABOR STATISTICS.....        | -                                 | -                | -                    | -                                                        | 742             | -                 | 742            | -                         | -              | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 5,330           | -                 | 4,751          | -                         | 579            | -                         |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | -                                 | -                | -                    | -                                                        | 5,583           | -                 | 5,583          | -                         | -              | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN....    | -                                 | -                | -                    | -                                                        | 3,025           | -                 | 3,025          | -                         | -              | -                         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN.... | -                                 | -                | -                    | -                                                        | 4,499           | -                 | 4,499          | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 245             | -                 | 245            | -                         | -              | -                         |
| DEPARTMENT OF STATE, TOTAL.....        | -                                 | -                | -                    | -                                                        | 18,459          | 550               | 6,528          | 2,200                     | 8,331          | 850                       |
| DEPARTMENTAL FUNDS.....                | -                                 | -                | -                    | -                                                        | 2,200           | -                 | -              | 2,200                     | -              | -                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | -                                 | -                | -                    | -                                                        | 16,259          | 550               | 6,528          | -                         | 8,331          | 850                       |

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TABLE C-27. FEDERAL OBLIGATIONS FOR RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| DEPT OF TRANSPORTATION, TOTAL.....      | 1,394                             | 272              | 429                  | 693                                                      | 1,156           | -                 | 1,021          | 135                       | -              | -                         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 31                                | -                | 31                   | -                                                        | 7               | -                 | 7              | -                         | -              | -                         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 1,363                             | 272              | 398                  | 693                                                      | 236             | -                 | 236            | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                        | 897             | -                 | 762            | 135                       | -              | -                         |
| US COAST GUARD.....                     | -                                 | -                | -                    | -                                                        | 16              | -                 | 16             | -                         | -              | -                         |
| OTHER AGENCIES                          |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| ACTION.....                             | -                                 | -                | -                    | -                                                        | 466             | -                 | 64             | -                         | 402            | -                         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | -                                 | -                | -                    | -                                                        | 1,659           | -                 | 829            | 830                       | -              | -                         |
| APPALACHIAN REGIONAL COMMISSION.....    | -                                 | -                | -                    | -                                                        | 600             | -                 | 600            | -                         | -              | -                         |
| CIVIL AERONAUTICS BOARD.....            | -                                 | -                | -                    | -                                                        | 734             | -                 | 734            | -                         | -              | -                         |
| COMMUNITY SERVICES ADMINISTRATION.....  | -                                 | -                | -                    | -                                                        | 1,000           | -                 | -              | -                         | 1,000          | -                         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | -                                 | -                | -                    | -                                                        | 293             | -                 | -              | -                         | -              | 293                       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 3,091                             | 1,991            | 1,100                | -                                                        | 3,600           | -                 | 2,650          | -                         | 950            | -                         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 102                               | -                | -                    | 102                                                      | 1,494           | -                 | 1,494          | -                         | -              | -                         |
| FEDERAL HOME LOAN BANK BOARD.....       | -                                 | -                | -                    | -                                                        | 1,113           | -                 | 1,113          | -                         | -              | -                         |
| FEDERAL TRADE COMMISSION.....           | -                                 | -                | -                    | -                                                        | 1,335           | -                 | 1,335          | -                         | -              | -                         |
| GENERAL SERVICES ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 59              | -                 | 59             | -                         | -              | -                         |
| INTERSTATE COMMERCE COMMISSION.....     | 50                                | 50               | -                    | -                                                        | 166             | -                 | 166            | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN..    | 28,760                            | 25,583           | 3,177                | -                                                        | 603             | -                 | 516            | 35                        | -              | 52                        |
| NATIONAL SCIENCE FOUNDATION.....        | 43,906                            | 23,707           | 20,199               | -                                                        | 51,409          | 4,879             | 11,090         | 3,099                     | 4,144          | 28,197                    |
| SMITHSONIAN INSTITUTION.....            | -                                 | -                | -                    | -                                                        | 11,327          | 4,774             | -              | -                         | -              | 6,553                     |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 196                               | -                | 100                  | 96                                                       | 1,070           | -                 | -              | 1,070                     | -              | -                         |
| US INTERNATIONAL TRADE COMMISSION.....  | -                                 | -                | -                    | -                                                        | 2,622           | -                 | 2,622          | -                         | -              | -                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-28. FEDERAL OBLIGATIONS FOR RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 230,349                           | 112,536          | 104,636              | 13,177                                                   | 556,908         | 17,555            | 176,258        | 11,585                    | 78,351         | 273,199                   |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 4,234                             | 4,234            | -                    | -                                                        | 70,460          | -                 | 65,881         | -                         | 3,843          | 736                       |
| ECON. STAT & COOPERATIVES SERVICE....  | 1,507                             | 1,507            | -                    | -                                                        | 33,392          | -                 | 31,547         | -                         | 1,156          | 669                       |
| FOREST SERVICE.....                    | 1,507                             | 1,507            | -                    | -                                                        | 6,633           | -                 | 5,485          | -                         | 1,168          | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 1,220                             | 1,220            | -                    | -                                                        | 30,435          | -                 | 28,849         | -                         | 1,519          | 67                        |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 28,369          | -                 | 26,867         | -                         | 1,502          | -                         |
| FEDERAL RESEARCH.....                  | 1,220                             | 1,220            | -                    | -                                                        | 2,066           | -                 | 1,982          | -                         | 17             | 67                        |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 13,586                            | 2,548            | 11,038               | -                                                        | 11,805          | -                 | 11,544         | -                         | 261            | -                         |
| BUREAU OF THE CENSUS.....              | 1,775                             | 1,534            | 241                  | -                                                        | 574             | -                 | 313            | -                         | 261            | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION.   | -                                 | -                | -                    | -                                                        | 5,500           | -                 | 5,500          | -                         | -              | -                         |
| MARITIME ADMINISTRATION.....           | -                                 | -                | -                    | -                                                        | 250             | -                 | 250            | -                         | -              | -                         |
| NATIONAL BUREAU OF STANDARDS.....      | 11,674                            | 877              | 10,797               | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 137                               | 137              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL OCEANIC AND ATMOS ADMIN....   | -                                 | -                | -                    | -                                                        | 4,481           | -                 | 4,481          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | -                                 | -                | -                    | -                                                        | 1,000           | -                 | 1,000          | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 100,821                           | 29,397           | 59,392               | 12,032                                                   | 29,941          | -                 | 1,142          | 2,143                     | 2,633          | 24,023                    |
| DEPARTMENT OF THE ARMY.....            | 13,700                            | 7,235            | 6,465                | -                                                        | 25,706          | -                 | 830            | -                         | 947            | 43,929                    |
| DEPARTMENT OF THE NAVY.....            | 38,268                            | 11,637           | 25,523               | 1,108                                                    | 1,634           | -                 | -              | -                         | 1,634          | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 10,063                            | 8,128            | 1,935                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 38,166                            | 1,981            | 25,261               | 10,924                                                   | 1,509           | -                 | -              | 1,415                     | -              | 94                        |
| DEPARTMENTWIDE FUNDS.....              | 624                               | 416              | 208                  | -                                                        | 1,092           | -                 | 312            | 728                       | 52             | -                         |
| DEPARTMENT OF ENERGY.....              | 12,810                            | 7,676            | 5,134                | -                                                        | 3,500           | -                 | 1,330          | -                         | 1,470          | 700                       |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 9,841                             | 9,641            | 200                  | -                                                        | 236,173         | 3,164             | 20,519         | 598                       | 32,066         | 179,828                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.   | 2,197                             | 2,197            | -                    | -                                                        | 27,827          | 3,164             | 328            | 318                       | 20,994         | 3,023                     |
| HEALTH CARE FINANCING ADMINISTRATION   | -                                 | -                | -                    | -                                                        | 38,552          | -                 | -              | -                         | -              | 38,552                    |
| HUMAN DEVELOPMENT SERVICES.....        | 200                               | -                | 200                  | -                                                        | 26,109          | -                 | 173            | -                         | 1,854          | 24,082                    |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 46,900          | -                 | -              | -                         | -              | 46,900                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 7,444                             | 7,444            | -                    | -                                                        | 7,794           | -                 | -              | -                         | -              | 7,794                     |
| OFFICE OF EDUCATION.....               | -                                 | -                | -                    | -                                                        | 16,727          | -                 | -              | -                         | -              | 16,727                    |
| OFFICE OF ASS'T SECTY FOR EDUCATION.   | -                                 | -                | -                    | -                                                        | 1,042           | -                 | -              | -                         | -              | 1,042                     |
| OFFICE OF ASS'T SECTY FOR HEALTH....   | -                                 | -                | -                    | -                                                        | 29,140          | -                 | 1,118          | 280                       | 1,118          | 26,624                    |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 27,000          | -                 | 18,900         | -                         | 8,100          | 15,084                    |
| SOCIAL SECURITY ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 15,084          | -                 | -              | -                         | -              | 15,084                    |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | -                                 | -                | -                    | -                                                        | 32,363          | -                 | 16,543         | -                         | -              | 15,820                    |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 5,076                             | 2,736            | 2,205                | 135                                                      | 6,703           | 3,614             | 1,123          | 910                       | 563            | 493                       |
| BUREAU OF LAND MANAGEMENT.....         | -                                 | -                | -                    | -                                                        | 101             | -                 | -              | -                         | 101            | -                         |
| BUREAU OF MINES.....                   | 2,400                             | 2,400            | -                    | -                                                        | 115             | -                 | 115            | -                         | -              | -                         |
| BUREAU OF RECLAMATION.....             | -                                 | -                | -                    | -                                                        | 170             | -                 | 120            | -                         | 50             | -                         |
| GEOLOGICAL SURVEY.....                 | 2,541                             | 336              | 2,205                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL PARK SERVICE.....             | -                                 | -                | -                    | -                                                        | 4,013           | 3,599             | 181            | -                         | 178            | 218                       |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 135                               | -                | -                    | 135                                                      | 2,395           | 15                | 870            | 910                       | 325            | 275                       |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 150                               | -                | -                    | 150                                                      | 24,957          | -                 | 228            | -                         | 17,044         | 7,685                     |
| BUREAU OF PRISONS.....                 | -                                 | -                | -                    | -                                                        | 1,331           | -                 | 228            | -                         | 343            | 760                       |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | 150                               | -                | -                    | 150                                                      | 21,626          | -                 | -              | -                         | 16,701         | 4,925                     |
| OFFICE OF THE ATTORNEY GENERAL.....    | -                                 | -                | -                    | -                                                        | 2,000           | -                 | -              | -                         | -              | 2,000                     |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 23,174          | -                 | 22,572         | -                         | 602            | -                         |
| BUREAU OF LABOR STATISTICS.....        | -                                 | -                | -                    | -                                                        | 860             | -                 | 860            | -                         | -              | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 5,455           | -                 | 4,853          | -                         | 602            | -                         |
| EMPLOYMENT STANDARDS ADMINISTRATION.   | -                                 | -                | -                    | -                                                        | 5,593           | -                 | 5,593          | -                         | -              | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN....    | -                                 | -                | -                    | -                                                        | 3,050           | -                 | 3,050          | -                         | -              | -                         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | -                                 | -                | -                    | -                                                        | 6,546           | -                 | 6,546          | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 1,670           | -                 | 1,670          | -                         | -              | -                         |
| DEPARTMENT OF STATE, TOTAL.....        | -                                 | -                | -                    | -                                                        | 22,349          | -                 | 8,315          | 2,029                     | 9,205          | 2,800                     |
| DEPARTMENTAL FUNDS.....                | -                                 | -                | -                    | -                                                        | 2,029           | -                 | -              | 2,029                     | -              | -                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | -                                 | -                | -                    | -                                                        | 20,320          | -                 | 8,315          | -                         | 9,205          | 2,800                     |

CONTINUED ON NEXT PAGE

TABLE C-28. FEDERAL OBLIGATIONS FOR RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES,  
BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                              | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|--------------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>(AND COM-<br>PUTER<br>SCIENCES<br>- NEC) | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| DEPT OF TRANSPORTATION, TOTAL.....      | 1,492                             | 293              | 454                  | 746                                                          | 1,461           | -                 | 1,290          | 171                       | -              | -                         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 26                                | -                | 26                   | -                                                            | 9               | -                 | 9              | -                         | -              | -                         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 1,467                             | 293              | 428                  | 746                                                          | 260             | -                 | 260            | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                            | 1,146           | -                 | 975            | 171                       | -              | -                         |
| US COAST GUARD.....                     | -                                 | -                | -                    | -                                                            | 46              | -                 | 46             | -                         | -              | -                         |
| OTHER AGENCIES                          |                                   |                  |                      |                                                              |                 |                   |                |                           |                |                           |
| ACTION.....                             | -                                 | -                | -                    | -                                                            | 3,882           | -                 | -              | -                         | 3,882          | -                         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | -                                 | -                | -                    | -                                                            | 1,664           | -                 | 832            | 832                       | -              | -                         |
| APPALACHIAN REGIONAL COMMISSION.....    | -                                 | -                | -                    | -                                                            | 600             | -                 | 600            | -                         | -              | -                         |
| CIVIL AERONAUTICS BOARD.....            | -                                 | -                | -                    | -                                                            | 836             | -                 | 836            | -                         | -              | -                         |
| COMMUNITY SERVICES ADMINISTRATION.....  | -                                 | -                | -                    | -                                                            | 1,000           | -                 | -              | -                         | 1,000          | -                         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | -                                 | -                | -                    | -                                                            | 341             | -                 | -              | -                         | -              | 341                       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 3,200                             | 2,000            | 1,200                | -                                                            | 3,600           | -                 | 2,700          | -                         | 900            | -                         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 84                                | -                | -                    | 84                                                           | 1,796           | -                 | 1,796          | -                         | -              | -                         |
| FEDERAL HOME LOAN BANK BOARD.....       | -                                 | -                | -                    | -                                                            | 1,316           | -                 | 1,316          | -                         | -              | -                         |
| FEDERAL TRADE COMMISSION.....           | -                                 | -                | -                    | -                                                            | 1,319           | -                 | 1,319          | -                         | -              | -                         |
| INTERSTATE COMMERCE COMMISSION.....     | 30                                | 30               | -                    | -                                                            | 35              | -                 | 35             | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 31,144                            | 28,299           | 2,845                | -                                                            | 607             | -                 | 520            | 35                        | -              | 52                        |
| NATIONAL SCIENCE FOUNDATION.....        | 47,650                            | 25,882           | 21,968               | -                                                            | 61,187          | 5,769             | 12,642         | 3,867                     | 4,882          | 34,027                    |
| SMALL BUSINESS ADMINISTRATION.....      | -                                 | -                | -                    | -                                                            | 55              | -                 | 55             | -                         | -              | -                         |
| SMITHSONIAN INSTITUTION.....            | -                                 | -                | -                    | -                                                            | 11,662          | 5,008             | -              | -                         | -              | 6,654                     |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 230                               | -                | 200                  | 30                                                           | 1,454           | -                 | 454            | 1,000                     | -              | -                         |
| US INTERNATIONAL TRADE COMMISSION.....  | -                                 | -                | -                    | -                                                            | 2,666           | -                 | 2,666          | -                         | -              | -                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-29. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1977  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                            |                            |                             |                                |                                   |        |        | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|-----------|-----------------|---------------------------------------------|----------------------------|----------------------------|-----------------------------|--------------------------------|-----------------------------------|--------|--------|-----------------------|---------|
|                                        |           |                 | INDUS-TRIAL FIRMS                           | ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | ADMIN BY NON-PROFIT INSTI-TUTIONS |        |        |                       |         |
|                                        |           |                 |                                             |                            |                            |                             |                                |                                   |        |        |                       |         |
| TOTAL, ALL AGENCIES.....               | 2,894,123 | 866,192         | 186,713                                     | 47,699                     | 1,314,501                  | 323,355                     | 121,769                        | 5,316                             | 11,155 | 17,423 |                       |         |
| DEPARTMENTS                            |           |                 |                                             |                            |                            |                             |                                |                                   |        |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 204,450   | 144,206         | 620                                         | -                          | 56,130                     | -                           | 109                            | -                                 | 395    | 2,990  |                       |         |
| ECON, STAT & COOPERATIVES SERVICE....  | 3,770     | 3,680           | -                                           | -                          | 90                         | -                           | -                              | -                                 | -      | -      |                       |         |
| FOREST SERVICE.....                    | 26,718    | 20,677          | 419                                         | -                          | 5,501                      | -                           | 34                             | -                                 | 87     | -      |                       |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 173,962   | 119,849         | 201                                         | -                          | 50,539                     | -                           | 75                             | -                                 | 308    | 2,990  |                       |         |
| COOPERATIVE RESEARCH.....              | 48,361    | 1,528           | -                                           | -                          | 46,837                     | -                           | -                              | -                                 | 196    | -      |                       |         |
| FEDERAL RESEARCH.....                  | 125,601   | 118,321         | 201                                         | -                          | 3,902                      | -                           | 75                             | -                                 | 112    | 2,990  |                       |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 23,159    | 18,385          | 1,326                                       | -                          | 2,396                      | 310                         | 660                            | -                                 | -      | 82     |                       |         |
| BUREAU OF THE CENSUS.....              | 200       | 33              | -                                           | -                          | 167                        | -                           | -                              | -                                 | -      | -      |                       |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 1,000     | 40              | 70                                          | -                          | 290                        | -                           | 600                            | -                                 | -      | -      |                       |         |
| MARITIME ADMINISTRATION.....           | 1,200     | 56              | 1,144                                       | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| NATIONAL BUREAU OF STANDARDS.....      | 6,918     | 6,094           | 33                                          | -                          | 709                        | -                           | -                              | -                                 | -      | 82     |                       |         |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 2,684     | 1,220           | 79                                          | -                          | 1,015                      | 310                         | 60                             | -                                 | -      | -      |                       |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 10,857    | 10,642          | -                                           | -                          | 215                        | -                           | -                              | -                                 | -      | -      |                       |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 100       | 100             | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 200       | 200             | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 294,826   | 107,447         | 42,225                                      | -                          | 130,905                    | 896                         | 7,233                          | 435                               | -      | 5,685  |                       |         |
| DEPARTMENT OF THE ARMY.....            | 58,552    | 31,362          | 2,976                                       | -                          | 22,194                     | -                           | 1,259                          | -                                 | -      | 761    |                       |         |
| DEPARTMENT OF THE NAVY.....            | 115,328   | 44,725          | 9,825                                       | -                          | 53,578                     | 420                         | 2,798                          | 41                                | -      | 3,941  |                       |         |
| DEPARTMENT OF THE AIR FORCE.....       | 85,300    | 25,165          | 17,160                                      | -                          | 40,950                     | -                           | 1,075                          | -                                 | -      | 950    |                       |         |
| DEFENSE AGENCIES.....                  | 35,646    | 6,195           | 12,264                                      | -                          | 14,183                     | 476                         | 2,101                          | 394                               | -      | 33     |                       |         |
| DEPARTMENT OF ENERGY.....              | 389,450   | 659             | 642                                         | 47,407                     | 71,103                     | 265,534                     | 576                            | 3,517                             | -      | 12     |                       |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 757,219   | 167,551         | 577                                         | -                          | 486,860                    | 1,489                       | 85,399                         | 353                               | 10,137 | 4,853  |                       |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 62,670    | 19,318          | -                                           | -                          | 31,914                     | -                           | 9,583                          | -                                 | 1,408  | 447    |                       |         |
| HEALTH SERVICES ADMINISTRATION.....    | 2,031     | 2,031           | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| HUMAN DEVELOPMENT SERVICES.....        | 2,178     | 110             | -                                           | -                          | 2,068                      | -                           | -                              | -                                 | -      | -      |                       |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 11,880    | 2,358           | 480                                         | -                          | 4,685                      | -                           | 3,207                          | -                                 | 1,150  | -      |                       |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 670,500   | 141,805         | -                                           | -                          | 444,608                    | 1,489                       | 71,451                         | 353                               | 7,504  | 3,290  |                       |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 4,006     | 737             | 24                                          | -                          | 1,190                      | -                           | 864                            | -                                 | 75     | 1,116  |                       |         |
| OFFICE OF THE SECRETARY.....           | 3,954     | 1,192           | 73                                          | -                          | 2,395                      | -                           | 294                            | -                                 | -      | -      |                       |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 128,909   | 118,553         | 1,472                                       | -                          | 7,994                      | -                           | -                              | -                                 | 290    | 600    |                       |         |
| BUREAU OF MINES.....                   | 4,000     | 4,000           | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| BUREAU OF RECLAMATION.....             | 120       | 80              | -                                           | -                          | -                          | -                           | -                              | -                                 | 40     | -      |                       |         |
| GEOLOGICAL SURVEY.....                 | 105,648   | 101,508         | -                                           | -                          | 4,140                      | -                           | -                              | -                                 | -      | -      |                       |         |
| OFFICE OF THE SECRETARY.....           | 3,176     | 1,053           | 1,172                                       | -                          | 351                        | -                           | -                              | -                                 | -      | 600    |                       |         |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 2,865     | 162             | -                                           | -                          | 2,703                      | -                           | -                              | -                                 | -      | -      |                       |         |
| US FISH AND WILDLIFE SERVICE.....      | 13,100    | 11,750          | 300                                         | -                          | 800                        | -                           | -                              | -                                 | 250    | -      |                       |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 5,100     | 536             | -                                           | -                          | 2,216                      | -                           | 2,348                          | -                                 | -      | -      |                       |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | 5,100     | 536             | -                                           | -                          | 2,216                      | -                           | 2,348                          | -                                 | -      | -      |                       |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 703       | 199             | -                                           | -                          | 504                        | -                           | -                              | -                                 | -      | -      |                       |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 558       | 54              | -                                           | -                          | 504                        | -                           | -                              | -                                 | -      | -      |                       |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 145       | 145             | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| OTHER AGENCIES                         |           |                 |                                             |                            |                            |                             |                                |                                   |        |        |                       |         |
| ACTION.....                            | 51        | 15              | -                                           | -                          | -                          | -                           | 36                             | -                                 | -      | -      |                       |         |
| CIVIL SERVICE COMMISSION.....          | 394       | 394             | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 8,296     | 415             | -                                           | -                          | 7,626                      | -                           | 255                            | -                                 | -      | -      |                       |         |
| FEDERAL TRADE COMMISSION.....          | 361       | 361             | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| GENERAL SERVICES ADMINISTRATION.....   | 99        | 9               | 90                                          | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| LIBRARY OF CONGRESS.....               | 140       | 140             | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| NATIONAL AERONAUTICS & SPACE ADMIN..   | 413,774   | 192,243         | 134,653                                     | -                          | 71,988                     | 9,317                       | 4,000                          | 634                               | 37     | 902    |                       |         |
| NATIONAL SCIENCE FOUNDATION.....       | 624,900   | 75,392          | 5,018                                       | 292                        | 474,892                    | 45,809                      | 20,537                         | 377                               | 284    | 2,299  |                       |         |
| SMITHSONIAN INSTITUTION.....           | 29,651    | 27,293          | -                                           | -                          | 1,795                      | -                           | 563                            | -                                 | -      | -      |                       |         |
| TENNESSEE VALLEY AUTHORITY.....        | 3,546     | 3,546           | -                                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| VETERANS ADMINISTRATION.....           | 9,095     | 8,848           | 90                                          | -                          | 92                         | -                           | 53                             | -                                 | 12     | -      |                       |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-30. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-<br>MURAL (1) | EXTRAMURAL               |                                                |                                   |                                                |                                              |                                                           |        |        | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|----------------------------------------|-----------|---------------------|--------------------------|------------------------------------------------|-----------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------|--------|--------------------------------|---------|
|                                        |           |                     | INDUS-<br>TRIAL<br>FIRMS | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS<br>AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |        |        |                                |         |
| TOTAL, ALL AGENCIES.....               | 3,292,330 | 975,295             | 227,658                  | 49,818                                         | 1,508,868                         | 345,950                                        | 142,379                                      | 5,782                                                     | 13,190 | 23,390 |                                |         |
| DEPARTMENTS                            |           |                     |                          |                                                |                                   |                                                |                                              |                                                           |        |        |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 251,043   | 168,471             | 115                      | -                                              | 78,822                            | -                                              | -                                            | -                                                         | 317    | 3,318  |                                |         |
| ECON. STAT & COOPERATIVES SERVICE....  | 4,233     | 4,191               | -                        | -                                              | 42                                | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| FOREST SERVICE.....                    | 31,095    | 23,975              | 115                      | -                                              | 6,905                             | -                                              | -                                            | -                                                         | 100    | -      |                                |         |
| SCIENCE AND EDUCATION ADMINISTRATION.. | 215,715   | 140,305             | -                        | -                                              | 71,875                            | -                                              | -                                            | -                                                         | 217    | 3,318  |                                |         |
| COOPERATIVE RESEARCH.....              | 69,216    | 2,418               | -                        | -                                              | 66,581                            | -                                              | -                                            | -                                                         | 217    | -      |                                |         |
| FEDERAL RESEARCH.....                  | 146,499   | 137,887             | -                        | -                                              | 5,294                             | -                                              | -                                            | -                                                         | -      | 3,318  |                                |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 26,721    | 20,132              | 1,529                    | -                                              | 3,730                             | 310                                            | 960                                          | -                                                         | -      | 60     |                                |         |
| BUREAU OF THE CENSUS.....              | 278       | 84                  | -                        | -                                              | 194                               | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 2,500     | 50                  | -                        | -                                              | 1,950                             | -                                              | 900                                          | -                                                         | -      | -      |                                |         |
| MARITIME ADMINISTRATION.....           | 1,500     | 50                  | 1,450                    | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| NATIONAL BUREAU OF STANDARDS.....      | 7,218     | 6,448               | -                        | -                                              | 710                               | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 2,796     | 1,314               | 79                       | -                                              | 1,033                             | 310                                            | 60                                           | -                                                         | -      | 60     |                                |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 12,129    | 11,886              | -                        | -                                              | 243                               | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 100       | 100                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| OFFICE OF MINORITY BUSINESS ENTERP.... | 200       | 200                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 329,791   | 108,420             | 51,279                   | -                                              | 150,513                           | 1,285                                          | 10,174                                       | 465                                                       | -      | 7,655  |                                |         |
| DEPARTMENT OF THE ARMY.....            | 61,724    | 31,220              | 3,317                    | -                                              | 24,341                            | -                                              | 2,050                                        | -                                                         | -      | 796    |                                |         |
| DEPARTMENT OF THE NAVY.....            | 130,563   | 46,161              | 12,709                   | -                                              | 62,057                            | 450                                            | 3,367                                        | 60                                                        | -      | 5,759  |                                |         |
| DEPARTMENT OF THE AIR FORCE.....       | 95,700    | 25,758              | 19,111                   | -                                              | 48,516                            | -                                              | 1,215                                        | -                                                         | -      | 1,100  |                                |         |
| DEFENSE AGENCIES.....                  | 41,804    | 5,281               | 16,142                   | -                                              | 15,599                            | 835                                            | 3,542                                        | 405                                                       | -      | -      |                                |         |
| DEPARTMENT OF ENERGY.....              | 432,692   | 687                 | 756                      | 49,523                                         | 92,850                            | 284,253                                        | 903                                          | 3,702                                                     | -      | 18     |                                |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 866,108   | 191,456             | 852                      | -                                              | 557,067                           | 1,649                                          | 95,153                                       | 397                                                       | 11,800 | 7,734  |                                |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 69,310    | 23,031              | -                        | -                                              | 34,648                            | -                                              | 9,106                                        | -                                                         | 1,573  | 952    |                                |         |
| HEALTH SERVICES ADMINISTRATION.....    | 2,300     | 2,300               | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| HUMAN DEVELOPMENT SERVICES.....        | 2,378     | 123                 | -                        | -                                              | 2,255                             | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 17,800    | 3,061               | 712                      | -                                              | 7,476                             | -                                              | 4,826                                        | -                                                         | 1,725  | -      |                                |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 763,100   | 160,670             | -                        | -                                              | 507,904                           | 1,649                                          | 80,262                                       | 397                                                       | 8,406  | 3,812  |                                |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 5,870     | 666                 | 33                       | -                                              | 1,521                             | -                                              | 584                                          | -                                                         | 96     | 2,970  |                                |         |
| OFFICE OF THE SECRETARY.....           | 5,350     | 1,605               | 107                      | -                                              | 3,263                             | -                                              | 375                                          | -                                                         | -      | -      |                                |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 158,457   | 142,570             | 1,382                    | -                                              | 13,499                            | -                                              | -                                            | -                                                         | 292    | 714    |                                |         |
| BUREAU OF MINES.....                   | 5,300     | 5,300               | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| BUREAU OF RECLAMATION.....             | 152       | 130                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | 22     | -      |                                |         |
| GEOLOGICAL SURVEY.....                 | 131,992   | 122,842             | -                        | -                                              | 9,150                             | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| OFFICE OF THE SECRETARY.....           | 3,013     | 1,426               | 476                      | -                                              | 397                               | -                                              | -                                            | -                                                         | -      | 714    |                                |         |
| OFFICE OF WATER RES AND TECHNOLOGY.... | 4,100     | 472                 | 606                      | -                                              | 3,002                             | -                                              | -                                            | -                                                         | 20     | -      |                                |         |
| US FISH AND WILDLIFE SERVICE.....      | 13,900    | 12,400              | 300                      | -                                              | 950                               | -                                              | -                                            | -                                                         | 250    | -      |                                |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 14,000    | 712                 | 1,250                    | -                                              | 4,185                             | -                                              | 7,253                                        | 150                                                       | 450    | -      |                                |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | 14,000    | 712                 | 1,250                    | -                                              | 4,185                             | -                                              | 7,253                                        | 150                                                       | 450    | -      |                                |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 675       | 177                 | -                        | -                                              | 498                               | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 560       | 62                  | -                        | -                                              | 498                               | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 115       | 115                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| OTHER AGENCIES                         |           |                     |                          |                                                |                                   |                                                |                                              |                                                           |        |        |                                |         |
| ACTION.....                            | 307       | 27                  | -                        | -                                              | -                                 | -                                              | 280                                          | -                                                         | -      | -      |                                |         |
| CIVIL SERVICE COMMISSION.....          | 409       | 409                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 8,325     | 416                 | 2,486                    | -                                              | 5,423                             | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| FEDERAL TRADE COMMISSION.....          | 454       | 454                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| GENERAL SERVICES ADMINISTRATION.....   | 1,384     | 1,314               | 70                       | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| LIBRARY OF CONGRESS.....               | 130       | 130                 | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 468,060   | 211,924             | 160,952                  | -                                              | 30,000                            | 9,147                                          | 4,525                                        | 653                                                       | 40     | 819    |                                |         |
| NATIONAL SCIENCE FOUNDATION.....       | 688,000   | 84,890              | 6,907                    | 295                                            | 520,336                           | 49,306                                         | 22,499                                       | 415                                                       | 280    | 3,072  |                                |         |
| SMITHSONIAN INSTITUTION.....           | 32,553    | 30,110              | -                        | -                                              | 1,860                             | -                                              | 583                                          | -                                                         | -      | -      |                                |         |
| TENNESSEE VALLEY AUTHORITY.....        | 3,712     | 3,712               | -                        | -                                              | -                                 | -                                              | -                                            | -                                                         | -      | -      |                                |         |
| VETERANS ADMINISTRATION.....           | 9,509     | 9,284               | 80                       | -                                              | 85                                | -                                              | 49                                           | -                                                         | 11     | -      |                                |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-31. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL        |                                   |                            |                                    |                                |                                          |        | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|-----------|-----------------|-------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|--------|-----------------------|---------|
|                                        |           |                 | INDUS-TRIAL FIRMS | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS |        |                       |         |
| TOTAL, ALL AGENCIES.....               | 3,636,729 | 1,046,245       | 268,608           | 54,470                            | 1,697,027                  | 373,026                            | 151,432                        | 6,320                                    | 15,218 | 24,383                |         |
| DEPARTMENTS                            |           |                 |                   |                                   |                            |                                    |                                |                                          |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 266,784   | 166,149         | 385               | -                                 | 96,410                     | -                                  | -                              | -                                        | 535    | 3,305                 |         |
| ECON, STAT & COOPERATIVES SERVICE....  | 4,373     | 4,329           | -                 | -                                 | 44                         | -                                  | -                              | -                                        | -      | -                     |         |
| FOREST SERVICE.....                    | 30,033    | 23,425          | 385               | -                                 | 5,883                      | -                                  | -                              | -                                        | 340    | -                     |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 232,378   | 138,395         | -                 | -                                 | 90,483                     | -                                  | -                              | -                                        | 195    | 3,305                 |         |
| COOPERATIVE RESEARCH.....              | 78,488    | 2,737           | -                 | -                                 | 75,556                     | -                                  | -                              | -                                        | 195    | -                     |         |
| FEDERAL RESEARCH.....                  | 153,890   | 135,658         | -                 | -                                 | 14,927                     | -                                  | -                              | -                                        | -      | 3,305                 |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 30,458    | 22,801          | 1,598             | -                                 | 4,339                      | 310                                | 1,315                          | -                                        | -      | 95                    |         |
| BUREAU OF THE CENSUS.....              | 397       | 161             | -                 | -                                 | 236                        | -                                  | -                              | -                                        | -      | -                     |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 2,000     | 50              | 140               | -                                 | 580                        | -                                  | 1,230                          | -                                        | -      | -                     |         |
| MARITIME ADMINISTRATION.....           | 1,200     | 50              | 1,150             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL BUREAU OF STANDARDS.....      | 8,322     | 7,517           | -                 | -                                 | 710                        | -                                  | -                              | -                                        | -      | 95                    |         |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 2,589     | 1,107           | 79                | -                                 | 1,033                      | 310                                | 60                             | -                                        | -      | -                     |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 15,650    | 13,616          | 229               | -                                 | 1,780                      | -                                  | 25                             | -                                        | -      | -                     |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 100       | 100             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF MINORITY BUSINESS ENTERP..   | 200       | 200             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 371,162   | 112,106         | 62,737            | -                                 | 176,741                    | 1,067                              | 9,528                          | 395                                      | -      | 8,589                 |         |
| DEPARTMENT OF THE ARMY.....            | 65,870    | 29,925          | 2,979             | -                                 | 30,293                     | -                                  | 1,891                          | -                                        | -      | 782                   |         |
| DEPARTMENT OF THE NAVY.....            | 151,893   | 48,693          | 14,594            | -                                 | 74,958                     | 450                                | 4,471                          | 70                                       | -      | 6,657                 |         |
| DEPARTMENT OF THE AIR FORCE.....       | 105,400   | 27,028          | 20,552            | -                                 | 55,160                     | -                                  | 1,510                          | -                                        | -      | 1,150                 |         |
| DEFENSE AGENCIES.....                  | 48,000    | 6,460           | 24,612            | -                                 | 14,330                     | 617                                | 1,656                          | 325                                      | -      | -                     |         |
| DEPARTMENT OF ENERGY.....              | 468,217   | 1,007           | 1,806             | 54,093                            | 104,297                    | 301,894                            | 957                            | 4,163                                    | -      | -                     |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 982,102   | 218,507         | 1,114             | -                                 | 636,223                    | 1,741                              | 103,944                        | 411                                      | 13,507 | 6,655                 |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 85,130    | 25,163          | -                 | -                                 | 46,323                     | -                                  | 10,596                         | -                                        | 1,981  | 1,067                 |         |
| HEALTH SERVICES ADMINISTRATION.....    | 2,300     | 2,300           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| HUMAN DEVELOPMENT SERVICES.....        | 2,378     | 123             | -                 | -                                 | 2,255                      | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 23,800    | 3,654           | 952               | -                                 | 10,234                     | -                                  | 6,652                          | -                                        | 2,308  | -                     |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 856,000   | 184,681         | -                 | -                                 | 571,808                    | 1,741                              | 84,991                         | 411                                      | 9,124  | 3,244                 |         |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 5,944     | 621             | 31                | -                                 | 1,608                      | -                                  | 1,246                          | -                                        | 94     | 2,344                 |         |
| OFFICE OF THE SECRETARY.....           | 6,550     | 1,965           | 131               | -                                 | 3,995                      | -                                  | 459                            | -                                        | -      | -                     |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 167,846   | 150,609         | 1,282             | -                                 | 14,580                     | -                                  | -                              | -                                        | 375    | 1,000                 |         |
| BUREAU OF MINES.....                   | 6,600     | 6,600           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF RECLAMATION.....             | 176       | 176             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| GEOLOGICAL SURVEY.....                 | 139,391   | 129,241         | -                 | -                                 | 10,150                     | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF THE SECRETARY.....           | 2,479     | 917             | 307               | -                                 | 255                        | -                                  | -                              | -                                        | -      | 1,000                 |         |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 4,200     | 475             | 625               | -                                 | 3,075                      | -                                  | -                              | -                                        | 25     | -                     |         |
| US FISH AND WILDLIFE SERVICE.....      | 15,000    | 13,200          | 350               | -                                 | 1,100                      | -                                  | -                              | -                                        | 350    | -                     |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 9,100     | 915             | 500               | -                                 | 3,291                      | -                                  | 3,694                          | 250                                      | 450    | -                     |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | 9,100     | 915             | 500               | -                                 | 3,291                      | -                                  | 3,694                          | 250                                      | 450    | -                     |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 588       | 162             | -                 | -                                 | 426                        | -                                  | -                              | -                                        | -      | -                     |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 473       | 47              | -                 | -                                 | 426                        | -                                  | -                              | -                                        | -      | -                     |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 115       | 115             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OTHER AGENCIES                         |           |                 |                   |                                   |                            |                                    |                                |                                          |        |                       |         |
| CIVIL SERVICE COMMISSION.....          | 409       | 409             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 16,860    | 5,833           | 3,106             | -                                 | 7,721                      | -                                  | 200                            | -                                        | -      | -                     |         |
| FEDERAL TRADE COMMISSION.....          | 444       | 444             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| GENERAL SERVICES ADMINISTRATION.....   | 17        | 17              | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| LIBRARY OF CONGRESS.....               | 130       | 130             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 519,775   | 230,934         | 189,709           | -                                 | 80,000                     | 12,597                             | 5,025                          | 650                                      | 40     | 820                   |         |
| NATIONAL SCIENCE FOUNDATION.....       | 754,900   | 91,526          | 6,289             | 377                               | 570,620                    | 55,417                             | 26,001                         | 451                                      | 300    | 3,919                 |         |
| SMITHSONIAN INSTITUTION.....           | 33,969    | 30,960          | -                 | -                                 | 2,291                      | -                                  | 718                            | -                                        | -      | -                     |         |
| TENNESSEE VALLEY AUTHORITY.....        | 4,178     | 4,178           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| VETERANS ADMINISTRATION.....           | 9,789     | 9,558           | 82                | -                                 | 88                         | -                                  | 50                             | -                                        | 11     | -                     |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-32. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY DETAILED FIELD OF SCIENCE:  
FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| FIELD OF SCIENCE                            | ACTUAL, 1977 | ESTIMATES |           |
|---------------------------------------------|--------------|-----------|-----------|
|                                             |              | 1978      | 1979      |
| TOTAL, ALL FIELDS.....                      | 2,894,123    | 3,292,330 | 3,636,729 |
| LIFE SCIENCES, TOTAL.....                   | 1,020,683    | 1,167,334 | 1,299,281 |
| BIOLOGICAL.....                             | 795,166      | 913,170   | 1,009,593 |
| CLINICAL MEDICAL.....                       | 34,697       | 37,489    | 40,434    |
| OTHER MEDICAL SCIENCES.....                 | 162,958      | 185,286   | 214,122   |
| LIFE SCIENCES, NEC.....                     | 27,862       | 31,389    | 35,132    |
| PSYCHOLOGY, TOTAL.....                      | 54,231       | 63,822    | 74,079    |
| BIOLOGICAL ASPECTS.....                     | 22,526       | 25,062    | 28,365    |
| SOCIAL ASPECTS.....                         | 18,608       | 22,107    | 25,407    |
| PSYCHOLOGICAL SCIENCES, NEC.....            | 13,097       | 16,653    | 20,307    |
| PHYSICAL SCIENCES, TOTAL.....               | 873,822      | 978,050   | 1,067,937 |
| ASTRONOMY.....                              | 193,228      | 231,619   | 268,402   |
| CHEMISTRY.....                              | 222,974      | 243,169   | 266,677   |
| PHYSICS.....                                | 448,100      | 492,238   | 517,821   |
| PHYSICAL SCIENCES, NEC.....                 | 9,520        | 11,024    | 15,037    |
| ENVIRONMENTAL SCIENCES, TOTAL.....          | 456,111      | 511,909   | 566,701   |
| ATMOSPHERIC SCIENCES.....                   | 149,650      | 154,398   | 181,222   |
| GEOLOGICAL SCIENCES.....                    | 180,086      | 215,641   | 232,140   |
| OCEANOGRAPHY.....                           | 115,696      | 128,513   | 139,469   |
| ENVIRONMENTAL SCIENCES, NEC.....            | 10,679       | 13,357    | 13,870    |
| MATHEMATICS & COMPUTER SCIENCES, TOTAL..... | 79,343       | 88,805    | 101,334   |
| MATHEMATICS.....                            | 48,419       | 52,554    | 60,158    |
| COMPUTER SCIENCES.....                      | 30,669       | 34,886    | 39,195    |
| MATHEMATICS & COMPUTER SCIENCES, NEC.....   | 255          | 1,365     | 1,981     |
| ENGINEERING, TOTAL.....                     | 303,079      | 345,531   | 374,308   |
| AERONAUTICAL.....                           | 47,353       | 58,811    | 64,886    |
| ASTRONAUTICAL.....                          | 9,977        | 11,714    | 12,844    |
| CHEMICAL.....                               | 15,558       | 18,385    | 17,192    |
| CIVIL.....                                  | 10,320       | 11,427    | 12,046    |
| ELECTRICAL.....                             | 46,430       | 49,290    | 53,134    |
| MECHANICAL.....                             | 30,256       | 24,579    | 26,656    |
| METALLURGY & MATERIALS.....                 | 120,059      | 131,546   | 145,353   |
| ENGINEERING, NEC.....                       | 23,126       | 39,779    | 42,195    |
| SOCIAL SCIENCES, TOTAL.....                 | 94,516       | 117,159   | 128,491   |
| ANTHROPOLOGY.....                           | 8,040        | 9,989     | 11,196    |
| ECONOMICS.....                              | 29,071       | 33,683    | 34,346    |
| POLITICAL SCIENCE.....                      | 2,544        | 3,141     | 3,964     |
| SOCIOLOGY.....                              | 15,846       | 24,059    | 22,040    |
| SOCIAL SCIENCES, NEC.....                   | 39,013       | 46,287    | 56,945    |
| OTHER SCIENCES, NEC.....                    | 12,338       | 19,720    | 24,598    |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-33. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | LIFE SCIENCES | PSY-CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL SCIENCES | OTHER SCIENCES<br>NRC |
|---------------------------------------------|-----------|---------------|-------------|-------------------|-----------------------------|---------------------------------------------------|------------------|-----------------|-----------------------|
| TOTAL, ALL AGENCIES.....                    | 2,894,123 | 1,020,683     | 54,231      | 873,822           | 456,111                     | 79,343                                            | 303,079          | 94,516          | 12,338                |
| DEPARTMENTS                                 |           |               |             |                   |                             |                                                   |                  |                 |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 204,450   | 144,389       | 26          | 27,458            | 4,384                       | 917                                               | 11,512           | 15,764          | -                     |
| ECON, STAT & COOPERATIVES SERVICE.....      | 3,770     | -             | -           | -                 | -                           | -                                                 | -                | 3,770           | -                     |
| FOREST SERVICE.....                         | 26,718    | 18,402        | 26          | 1,967             | 2,650                       | 603                                               | 2,203            | 865             | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 173,962   | 125,987       | -           | 25,491            | 1,734                       | 314                                               | 9,307            | 11,129          | -                     |
| COOPERATIVE RESEARCH.....                   | 48,361    | 33,231        | -           | 2,418             | 302                         | -                                                 | 1,658            | 10,752          | -                     |
| FEDERAL RESEARCH.....                       | 125,601   | 92,756        | -           | 23,073            | 1,432                       | 314                                               | 7,649            | 377             | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 23,159    | 16            | 45          | 8,191             | 10,857                      | 155                                               | 2,551            | 1,200           | -                     |
| BUREAU OF THE CENSUS.....                   | 200       | -             | 45          | -                 | -                           | 155                                               | -                | -               | -                     |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....    | 1,000     | -             | -           | -                 | -                           | -                                                 | -                | 1,000           | -                     |
| MARITIME ADMINISTRATION.....                | 1,200     | -             | -           | -                 | -                           | -                                                 | 1,200            | -               | -                     |
| NATIONAL BUREAU OF STANDARDS.....           | 8,918     | -             | -           | 5,667             | -                           | -                                                 | 1,251            | -               | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 2,684     | 160           | -           | 2,524             | -                           | -                                                 | -                | -               | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 10,857    | -             | -           | -                 | 10,857                      | -                                                 | -                | -               | -                     |
| NAT'L TELECOMM & INFO ADMIN.....            | 100       | -             | -           | -                 | -                           | -                                                 | 100              | -               | -                     |
| OFFICE OF MINORITY BUSINESS ENTERP.....     | 200       | -             | -           | -                 | -                           | -                                                 | -                | 200             | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 294,826   | 32,172        | 11,237      | 72,150            | 52,733                      | 25,138                                            | 99,858           | 1,399           | 139                   |
| DEPARTMENT OF THE ARMY.....                 | 58,552    | 16,262        | 2,879       | 14,179            | 4,790                       | 3,679                                             | 16,617           | 146             | -                     |
| DEPARTMENT OF THE NAVY.....                 | 115,328   | 11,512        | 2,503       | 33,103            | 41,296                      | 7,982                                             | 17,679           | 1,253           | -                     |
| DEPARTMENT OF THE AIR FORCE.....            | 85,300    | 3,652         | 3,203       | 21,203            | 6,228                       | 7,963                                             | 43,051           | -               | -                     |
| DEFENSE AGENCIES.....                       | 35,646    | 740           | 2,652       | 3,665             | 419                         | 5,514                                             | 22,511           | -               | 139                   |
| DEPARTMENT OF ENERGY.....                   | 389,450   | 25,821        | -           | 293,823           | 3,540                       | 6,839                                             | 59,427           | -               | -                     |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 757,219   | 652,257       | 28,326      | 35,261            | -                           | 3,404                                             | 6,132            | 25,819          | 6,020                 |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 62,670    | 33,963        | 18,421      | 898               | -                           | 573                                               | -                | 6,441           | 2,374                 |
| HEALTH SERVICES ADMINISTRATION.....         | 2,031     | 2,031         | -           | -                 | -                           | -                                                 | -                | -               | -                     |
| HUMAN DEVELOPMENT SERVICES.....             | 2,178     | 2,178         | -           | -                 | -                           | -                                                 | -                | -               | -                     |
| NATIONAL INSTITUTE OF EDUCATION.....        | 11,880    | -             | -           | -                 | -                           | -                                                 | -                | 11,880          | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 670,500   | 614,085       | 9,905       | 34,363            | -                           | 2,831                                             | 6,132            | 654             | 2,530                 |
| OFFICE OF ASS'T SECTY FOR HEALTH.....       | 4,006     | -             | -           | -                 | -                           | -                                                 | -                | 2,890           | 1,116                 |
| OFFICE OF THE SECRETARY.....                | 3,954     | -             | -           | -                 | -                           | -                                                 | -                | 3,954           | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 128,909   | 13,472        | -           | 9,390             | 99,858                      | 1,411                                             | 4,282            | 328             | 168                   |
| BUREAU OF MINES.....                        | 4,000     | -             | -           | 2,380             | 320                         | 400                                               | 900              | -               | -                     |
| BUREAU OF RECLAMATION.....                  | 120       | -             | -           | -                 | -                           | -                                                 | 110              | -               | 10                    |
| GEOLOGICAL SURVEY.....                      | 105,648   | -             | -           | 6,795             | 97,853                      | 1,000                                             | -                | -               | -                     |
| OFFICE OF THE SECRETARY.....                | 3,176     | -             | -           | -                 | 600                         | -                                                 | 2,576            | -               | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 2,865     | 372           | -           | 215               | 1,085                       | 11                                                | 696              | 328             | 158                   |
| US FISH AND WILDLIFE SERVICE.....           | 13,100    | 13,100        | -           | -                 | -                           | -                                                 | -                | -               | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 5,100     | -             | 484         | -                 | -                           | -                                                 | -                | 4,616           | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 5,100     | -             | 484         | -                 | -                           | -                                                 | -                | 4,616           | -                     |
| DEPARTMENT OF LABOR, TOTAL.....             | 703       | -             | 39          | -                 | -                           | -                                                 | -                | 664             | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....          | 558       | -             | 39          | -                 | -                           | -                                                 | -                | 519             | -                     |
| LABOR-MANAGEMENT SERVICES ADMIN.....        | 145       | -             | -           | -                 | -                           | -                                                 | -                | 145             | -                     |
| OTHER AGENCIES                              |           |               |             |                   |                             |                                                   |                  |                 |                       |
| ACTION.....                                 | 51        | -             | -           | -                 | -                           | -                                                 | -                | 51              | -                     |
| CIVIL SERVICE COMMISSION.....               | 394       | -             | 394         | -                 | -                           | -                                                 | -                | -               | -                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 8,296     | 6,074         | -           | 1,461             | 761                         | -                                                 | -                | -               | -                     |
| FEDERAL TRADE COMMISSION.....               | 361       | -             | -           | -                 | -                           | -                                                 | -                | 361             | -                     |
| GENERAL SERVICES ADMINISTRATION.....        | 99        | -             | -           | -                 | -                           | -                                                 | 90               | -               | 9                     |
| LIBRARY OF CONGRESS.....                    | 140       | -             | -           | -                 | -                           | -                                                 | -                | -               | 140                   |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 413,774   | 16,195        | 1,319       | 239,592           | 103,968                     | 2,494                                             | 48,803           | 82              | 1,321                 |
| NATIONAL SCIENCE FOUNDATION.....            | 624,900   | 108,237       | 11,381      | 179,180           | 177,627                     | 38,985                                            | 70,424           | 34,525          | 4,541                 |
| SMITHSONIAN INSTITUTION.....                | 29,651    | 12,554        | -           | 5,007             | 2,383                       | -                                                 | -                | 9,707           | -                     |
| TENNESSEE VALLEY AUTHORITY.....             | 3,546     | 1,237         | -           | 2,309             | -                           | -                                                 | -                | -               | -                     |
| VETERANS ADMINISTRATION.....                | 9,095     | 8,115         | 980         | -                 | -                           | -                                                 | -                | -               | -                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-34. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | LIFE SCIENCES | PSY-<br>CHOLOGY | PHYSICAL<br>SCIENCES | ENVIRON-<br>MENTAL<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|---------------------------------------------|-----------|---------------|-----------------|----------------------|--------------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| TOTAL, ALL AGENCIES.....                    | 3,292,330 | 1,167,334     | 63,822          | 978,050              | 511,909                        | 88,805                                            | 345,531          | 117,159            | 19,720                   |
| DEPARTMENTS                                 |           |               |                 |                      |                                |                                                   |                  |                    |                          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 251,043   | 183,165       | 31              | 30,153               | 5,150                          | 1,095                                             | 13,664           | 17,785             | -                        |
| ECON, STAT & COOPERATIVES SERVICE.....      | 4,233     | -             | -               | -                    | -                              | -                                                 | -                | 4,233              | -                        |
| FOREST SERVICE.....                         | 31,095    | 21,238        | 31              | 2,332                | 3,141                          | 715                                               | 2,612            | 1,026              | -                        |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 215,715   | 161,927       | -               | 27,821               | 2,009                          | 380                                               | 11,052           | 12,526             | -                        |
| COOPERATIVE RESEARCH.....                   | 69,216    | 52,226        | -               | 2,711                | 339                            | -                                                 | 1,853            | 12,087             | -                        |
| FEDERAL RESEARCH.....                       | 146,499   | 109,701       | -               | 25,110               | 1,670                          | 380                                               | 9,199            | 439                | -                        |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 26,721    | 177           | 60              | 8,480                | 12,129                         | 218                                               | 2,957            | 2,700              | -                        |
| BUREAU OF THE CENSUS.....                   | 278       | -             | 60              | -                    | -                              | 218                                               | -                | -                  | -                        |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....    | 2,500     | -             | -               | -                    | -                              | -                                                 | -                | 2,500              | -                        |
| MARITIME ADMINISTRATION.....                | 1,500     | -             | -               | -                    | -                              | -                                                 | 1,500            | -                  | -                        |
| NATIONAL BUREAU OF STANDARDS.....           | 7,218     | -             | -               | 5,861                | -                              | -                                                 | 1,357            | -                  | -                        |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 2,796     | 177           | -               | 2,619                | -                              | -                                                 | -                | -                  | -                        |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 12,129    | -             | -               | -                    | 12,129                         | -                                                 | -                | -                  | -                        |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 100       | -             | -               | -                    | -                              | -                                                 | 100              | -                  | -                        |
| OFFICE OF MINORITY BUSINESS ENTERP.....     | 200       | -             | -               | -                    | -                              | -                                                 | -                | 200                | -                        |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 329,791   | 34,635        | 14,158          | 78,133               | 60,727                         | 30,176                                            | 108,469          | 1,490              | 2,003                    |
| DEPARTMENT OF THE ARMY.....                 | 61,724    | 16,963        | 2,738           | 13,577               | 5,604                          | 3,956                                             | 18,734           | 152                | -                        |
| DEPARTMENT OF THE NAVY.....                 | 130,563   | 12,260        | 3,212           | 38,131               | 46,935                         | 8,304                                             | 20,383           | 1,338              | -                        |
| DEPARTMENT OF THE AIR FORCE.....            | 95,700    | 4,508         | 4,200           | 22,294               | 7,288                          | 8,590                                             | 48,820           | -                  | -                        |
| DEFENSE AGENCIES.....                       | 41,804    | 904           | 4,008           | 4,131                | 900                            | 9,326                                             | 20,532           | -                  | 2,003                    |
| DEPARTMENT OF ENERGY.....                   | 432,692   | 25,870        | -               | 325,147              | 4,060                          | 7,420                                             | 67,008           | -                  | 3,187                    |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 686,108   | 741,004       | 31,204          | 40,036               | -                              | 3,834                                             | 6,982            | 34,196             | 8,852                    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 69,310    | 37,433        | 19,933          | 927                  | -                              | 614                                               | -                | 6,970              | 3,433                    |
| HEALTH SERVICES ADMINISTRATION.....         | 2,300     | 2,300         | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| HUMAN DEVELOPMENT SERVICES.....             | 2,378     | 2,378         | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| NATIONAL INSTITUTE OF EDUCATION.....        | 17,800    | -             | -               | -                    | -                              | -                                                 | -                | 17,800             | -                        |
| NATIONAL INSTITUTES OF HEALTH.....          | 763,100   | 698,893       | 11,271          | 39,109               | -                              | 3,220                                             | 6,982            | 748                | 2,877                    |
| OFFICE OF ASST SECY FOR HEALTH.....         | 5,870     | -             | -               | -                    | -                              | -                                                 | -                | 3,328              | 2,542                    |
| OFFICE OF THE SECRETARY.....                | 5,350     | -             | -               | -                    | -                              | -                                                 | -                | 5,350              | -                        |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 158,457   | 14,440        | -               | 10,751               | 126,925                        | 1,816                                             | 3,780            | 465                | 280                      |
| BUREAU OF MINES.....                        | 5,300     | -             | -               | 3,000                | 450                            | 600                                               | 1,250            | -                  | -                        |
| BUREAU OF RECLAMATION.....                  | 152       | -             | -               | -                    | -                              | -                                                 | 97               | -                  | 55                       |
| GEOLOGICAL SURVEY.....                      | 131,992   | -             | -               | 7,441                | 123,361                        | 1,190                                             | -                | -                  | -                        |
| OFFICE OF THE SECRETARY.....                | 3,013     | -             | -               | -                    | 1,569                          | 11                                                | 1,433            | -                  | -                        |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 4,100     | 540           | -               | 310                  | 1,545                          | 151                                               | 1,000            | 465                | 225                      |
| US FISH AND WILDLIFE SERVICE.....           | 13,900    | 13,900        | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 14,000    | -             | 1,764           | -                    | -                              | -                                                 | -                | 12,236             | -                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 14,000    | -             | 1,764           | -                    | -                              | -                                                 | -                | 12,236             | -                        |
| DEPARTMENT OF LABOR, TOTAL.....             | 675       | -             | 39              | -                    | -                              | -                                                 | -                | 636                | -                        |
| EMPLOYMENT AND TRAINING ADMIN.....          | 560       | -             | 39              | -                    | -                              | -                                                 | -                | 521                | -                        |
| LABOR-MANAGEMENT SERVICES ADMIN.....        | 115       | -             | -               | -                    | -                              | -                                                 | -                | 115                | -                        |
| OTHER AGENCIES                              |           |               |                 |                      |                                |                                                   |                  |                    |                          |
| ACTION.....                                 | 307       | -             | -               | -                    | -                              | -                                                 | -                | 307                | -                        |
| CIVIL SERVICE COMMISSION.....               | 409       | -             | 409             | -                    | -                              | -                                                 | -                | -                  | -                        |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 8,325     | 6,025         | -               | 1,100                | 1,200                          | -                                                 | -                | -                  | -                        |
| FEDERAL TRADE COMMISSION.....               | 454       | -             | -               | -                    | -                              | -                                                 | -                | 454                | -                        |
| GENERAL SERVICES ADMINISTRATION.....        | 1,384     | -             | -               | -                    | -                              | -                                                 | 1,370            | -                  | 14                       |
| LIBRARY OF CONGRESS.....                    | 130       | -             | -               | -                    | -                              | -                                                 | -                | -                  | 130                      |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 488,060   | 18,815        | 1,944           | 284,673              | 98,847                         | 3,059                                             | 60,432           | 90                 | 200                      |
| NATIONAL SCIENCE FOUNDATION.....            | 688,000   | 120,640       | 13,189          | 191,251              | 200,331                        | 41,187                                            | 80,869           | 35,473             | 5,054                    |
| SMITHSONIAN INSTITUTION.....                | 32,553    | 12,703        | -               | 5,983                | 2,540                          | -                                                 | -                | 11,327             | -                        |
| TENNESSEE VALLEY AUTHORITY.....             | 3,712     | 1,369         | -               | 2,343                | -                              | -                                                 | -                | -                  | -                        |
| VETERANS ADMINISTRATION.....                | 9,509     | 8,485         | 1,024           | -                    | -                              | -                                                 | -                | -                  | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-35. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | LIFE SCIENCES | PSYCHOLOGY | PHYSICAL SCIENCES | ENVIRONMENTAL SCIENCES | MATHEMATICS AND COMPUTER SCIENCES | ENGINEERING | SOCIAL SCIENCES | OTHER SCIENCES NEC |
|----------------------------------------|-----------|---------------|------------|-------------------|------------------------|-----------------------------------|-------------|-----------------|--------------------|
| TOTAL, ALL AGENCIES.....               | 3,636,729 | 1,299,281     | 74,079     | 1,067,937         | 566,701                | 101,334                           | 374,308     | 128,491         | 24,598             |
| DEPARTMENTS                            |           |               |            |                   |                        |                                   |             |                 |                    |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 266,784   | 197,479       | 301        | 32,947            | 5,090                  | 1,076                             | 13,556      | 16,606          | -                  |
| ECON. STAT & COOPERATIVES SERVICE....  | 4,373     | -             | -          | -                 | -                      | 691                               | 2,522       | 991             | -                  |
| FOREST SERVICE.....                    | 30,033    | 20,513        | 301        | 2,253             | 3,033                  | 385                               | 11,034      | 11,242          | -                  |
| SCIENCE AND EDUCATION ADMINISTRATION   | 232,378   | 176,966       | -          | 30,694            | 2,057                  | -                                 | -           | -               | -                  |
| COOPERATIVE RESEARCH.....              | 78,488    | 63,319        | -          | 2,424             | 303                    | -                                 | 1,662       | 10,780          | -                  |
| FEDERAL RESEARCH.....                  | 153,890   | 113,647       | -          | 28,270            | 1,754                  | 385                               | 9,372       | 4621            | -                  |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 30,458    | 177           | 85         | 9,129             | 15,665                 | 312                               | 2,890       | 2,200           | -                  |
| BUREAU OF THE CENSUS.....              | 397       | -             | 85         | -                 | -                      | 312                               | -           | -               | -                  |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 2,000     | -             | -          | -                 | -                      | -                                 | 1,200       | 2,000           | -                  |
| MARITIME ADMINISTRATION.....           | 1,200     | -             | -          | -                 | -                      | -                                 | 1,590       | -               | -                  |
| NATIONAL BUREAU OF STANDARDS.....      | 8,322     | -             | -          | 6,717             | 15                     | -                                 | -           | -               | -                  |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 2,589     | 177           | -          | 2,412             | -                      | -                                 | -           | -               | -                  |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 15,650    | -             | -          | -                 | 15,650                 | -                                 | 100         | -               | -                  |
| NAT'L TELECOMM & INFO ADMIN.....       | 100       | -             | -          | -                 | -                      | -                                 | -           | 200             | -                  |
| OFFICE OF MINORITY BUSINESS ENTERP.... | 200       | -             | -          | -                 | -                      | -                                 | -           | -               | -                  |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 371,163   | 40,318        | 16,118     | 88,663            | 72,325                 | 33,831                            | 114,234     | 1,873           | 3,801              |
| DEPARTMENT OF THE ARMY.....            | 65,870    | 20,023        | 3,258      | 14,135            | 5,744                  | 4,241                             | 15,037      | 145             | 3,287              |
| DEPARTMENT OF THE NAVY.....            | 151,893   | 13,825        | 3,823      | 45,185            | 55,107                 | 9,854                             | 22,465      | 1,634           | -                  |
| DEPARTMENT OF THE AIR FORCE.....       | 105,400   | 5,270         | 4,216      | 24,242            | 8,432                  | 9,486                             | 53,754      | -               | 514                |
| DEFENSE AGENCIES.....                  | 48,000    | 1,200         | 4,821      | 5,101             | 3,042                  | 10,250                            | 22,978      | 94              | -                  |
| DEPARTMENT OF ENERGY.....              | 468,217   | 25,017        | -          | 342,054           | 7,730                  | 11,810                            | 77,806      | -               | 3,800              |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 982,102   | 834,926       | 36,888     | 44,434            | -                      | 4,383                             | 7,828       | 43,397          | 10,246             |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 85,130    | 46,270        | 24,243     | 564               | -                      | 769                               | -           | 8,612           | 4,672              |
| HEALTH SERVICES ADMINISTRATION.....    | 2,300     | 2,300         | -          | -                 | -                      | -                                 | -           | -               | -                  |
| HUMAN DEVELOPMENT SERVICES.....        | 2,378     | 2,378         | -          | -                 | -                      | -                                 | -           | 23,800          | -                  |
| NATIONAL INSTITUTE OF EDUCATION.....   | 23,800    | -             | -          | -                 | -                      | 3,614                             | 7,828       | 835             | 3,230              |
| NATIONAL INSTITUTES OF HEALTH.....     | 856,000   | 783,978       | 12,645     | 43,870            | -                      | -                                 | -           | 3,600           | 2,344              |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 5,944     | -             | -          | -                 | -                      | -                                 | -           | 6,550           | -                  |
| OFFICE OF THE SECRETARY.....           | 6,550     | -             | -          | -                 | -                      | -                                 | -           | -               | -                  |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 167,846   | 15,550        | -          | 12,353            | 133,089                | 2,074                             | 4,025       | 475             | 280                |
| BUREAU OF MINES.....                   | 6,600     | -             | -          | 4,000             | 500                    | 700                               | 1,400       | -               | -                  |
| BUREAU OF RECLAMATION.....             | 176       | -             | -          | -                 | -                      | -                                 | 126         | -               | 50                 |
| GEOLOGICAL SURVEY.....                 | 139,391   | -             | -          | 8,033             | 129,999                | 1,359                             | 1,479       | -               | -                  |
| OFFICE OF THE SECRETARY.....           | 2,479     | -             | -          | -                 | 1,000                  | -                                 | 1,020       | 475             | 230                |
| OFFICE OF WATER RES AND TECHNOLOGY.... | 4,200     | 550           | -          | 320               | 1,590                  | 15                                | -           | -               | -                  |
| US FISH AND WILDLIFE SERVICE.....      | 15,000    | 15,000        | -          | -                 | -                      | -                                 | -           | -               | -                  |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 9,100     | -             | 2,253      | -                 | -                      | -                                 | -           | 6,847           | -                  |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 9,100     | -             | 2,253      | -                 | -                      | -                                 | -           | 6,847           | -                  |
| DEPARTMENT OF LABOR, TOTAL.....        | 588       | -             | 39         | -                 | -                      | -                                 | -           | 549             | -                  |
| EMPLOYMENT AND TRAINING ADMIN.....     | 473       | -             | 39         | -                 | -                      | -                                 | -           | 434             | -                  |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 115       | -             | -          | -                 | -                      | -                                 | -           | 115             | -                  |
| OTHER AGENCIES                         |           |               |            |                   |                        |                                   |             |                 |                    |
| CIVIL SERVICE COMMISSION.....          | 409       | -             | -          | 409               | -                      | -                                 | -           | -               | -                  |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 16,860    | 11,560        | -          | -                 | 1,900                  | 3,400                             | -           | 444             | -                  |
| FEDERAL TRADE COMMISSION.....          | 444       | -             | -          | -                 | -                      | -                                 | -           | -               | 17                 |
| GENERAL SERVICES ADMINISTRATION.....   | 171       | -             | -          | -                 | -                      | -                                 | -           | -               | 130                |
| LIBRARY OF CONGRESS.....               | 130       | -             | -          | -                 | -                      | -                                 | -           | -               | 200                |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 519,775   | 20,467        | 2,135      | 317,965           | 109,442                | 3,346                             | 66,130      | 90              | 8,124              |
| NATIONAL SCIENCE FOUNDATION.....       | 754,900   | 130,265       | 15,067     | 209,416           | 217,339                | 44,502                            | 87,839      | 44,348          | -                  |
| SMITHSONIAN INSTITUTION.....           | 33,969    | 13,291        | -          | 6,395             | 2,621                  | -                                 | -           | 11,662          | -                  |
| TEMPERATURE VALLEY AUTHORITY.....      | 4,178     | 1,497         | -          | 2,681             | -                      | -                                 | -           | -               | -                  |
| VETERANS ADMINISTRATION.....           | 9,789     | 8,734         | 1,055      | -                 | -                      | -                                 | -           | -               | -                  |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-36. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                    | PSYCHOLOGY |                     |                |                             | PHYSICAL SCIENCES |           |           |         |                       |
|-------------------------------------------|------------|---------------------|----------------|-----------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                           | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                  | 54,231     | 22,526              | 18,608         | 13,097                      | 873,822           | 193,228   | 222,974   | 448,100 | 9,520                 |
| DEPARTMENTS                               |            |                     |                |                             |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....     | 26         | -                   | 26             | -                           | 27,458            | -         | 23,941    | 3,517   | -                     |
| FOREST SERVICE.....                       | 26         | -                   | 26             | -                           | 1,967             | -         | 1,364     | 603     | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION..... | -          | -                   | -              | -                           | 25,491            | -         | 22,577    | 2,914   | -                     |
| COOPERATIVE RESEARCH.....                 | -          | -                   | -              | -                           | 2,418             | -         | 2,418     | -       | -                     |
| FEDERAL RESEARCH.....                     | -          | -                   | -              | -                           | 23,073            | -         | 20,159    | 2,914   | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....        | 45         | -                   | 45             | -                           | 8,191             | 357       | 2,831     | 5,003   | -                     |
| BUREAU OF THE CENSUS.....                 | 45         | -                   | 45             | -                           | -                 | -         | -         | -       | -                     |
| NATIONAL BUREAU OF STANDARDS.....         | -          | -                   | -              | -                           | 5,667             | 357       | 1,620     | 3,690   | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....   | -          | -                   | -              | -                           | 2,524             | -         | 1,211     | 1,313   | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....         | 11,237     | 977                 | 7,491          | 2,769                       | 72,150            | 8,172     | 25,313    | 35,915  | 8,750                 |
| DEPARTMENT OF THE ARMY.....               | 2,079      | -                   | 1,785          | 1,094                       | 14,179            | -         | 9,576     | 4,527   | 76                    |
| DEPARTMENT OF THE NAVY.....               | 2,503      | -                   | 2,503          | -                           | 33,103            | 5,509     | 7,226     | 20,368  | -                     |
| DEPARTMENT OF THE AIR FORCE.....          | 3,203      | -                   | 3,203          | -                           | 21,203            | 2,663     | 8,371     | 8,298   | 1,671                 |
| DEFENSE AGENCIES.....                     | 2,652      | 977                 | -              | 1,675                       | 3,665             | -         | 140       | 2,722   | 803                   |
| DEPARTMENT OF ENERGY.....                 | -          | -                   | -              | -                           | 293,823           | -         | 61,742    | 232,081 | -                     |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL    | 28,326     | 11,400              | 7,021          | 9,905                       | 35,261            | -         | 33,636    | 1,625   | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....  | 18,421     | 11,400              | 7,021          | -                           | 898               | -         | 898       | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....        | 9,905      | -                   | -              | 9,905                       | 34,363            | -         | 32,738    | 1,625   | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....    | -          | -                   | -              | -                           | 9,390             | -         | 7,433     | 1,157   | 800                   |
| BUREAU OF MINES.....                      | -          | -                   | -              | -                           | 2,380             | -         | 1,460     | 120     | 800                   |
| GEOLOGICAL SURVEY.....                    | -          | -                   | -              | -                           | 6,795             | -         | 5,795     | 1,000   | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY.....   | -          | -                   | -              | -                           | 215               | -         | 178       | 37      | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....         | 484        | -                   | 484            | -                           | -                 | -         | -         | -       | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....     | 484        | -                   | 484            | -                           | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF LABOR, TOTAL.....           | 39         | -                   | 39             | -                           | -                 | -         | -         | -       | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....        | 39         | -                   | 39             | -                           | -                 | -         | -         | -       | -                     |
| OTHER AGENCIES                            |            |                     |                |                             |                   |           |           |         |                       |
| CIVIL SERVICE COMMISSION.....             | 394        | -                   | 394            | -                           | -                 | -         | -         | -       | -                     |
| ENVIRONMENTAL PROTECTION AGENCY.....      | -          | -                   | -              | -                           | 1,461             | -         | 1,051     | 410     | -                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....   | 1,319      | 806                 | 90             | 423                         | 239,592           | 138,107   | 10,331    | 85,217  | 5,937                 |
| NATIONAL SCIENCE FOUNDATION.....          | 11,381     | 8,368               | 3,013          | -                           | 179,180           | 41,585    | 54,387    | 83,175  | 33                    |
| SMITHSONIAN INSTITUTION.....              | -          | -                   | -              | -                           | 5,007             | 5,007     | -         | -       | -                     |
| TENNESSEE VALLEY AUTHORITY.....           | -          | -                   | -              | -                           | 2,309             | -         | 2,309     | -       | -                     |
| VETERANS ADMINISTRATION.....              | 980        | 975                 | 5              | -                           | -                 | -         | -         | -       | -                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-37. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                    | PSYCHOLOGY |                     |                |                         | PHYSICAL SCIENCES |           |           |         |                       |
|-------------------------------------------|------------|---------------------|----------------|-------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                           | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
|                                           |            |                     |                | DEC                     |                   |           |           |         |                       |
| TOTAL, ALL AGENCIES.....                  | 63,822     | 25,062              | 22,107         | 16,653                  | 978,050           | 231,619   | 243,169   | 492,238 | 11,024                |
| DEPARTMENTS                               |            |                     |                |                         |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....     | 31         | -                   | 31             | -                       | 30,153            | -         | 26,097    | 4,056   | -                     |
| FOREST SERVICE.....                       | 31         | -                   | 31             | -                       | 2,332             | -         | 1,617     | 715     | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION..... | -          | -                   | -              | -                       | 27,821            | -         | 24,480    | 3,341   | -                     |
| COOPERATIVE RESEARCH.....                 | -          | -                   | -              | -                       | 2,711             | -         | 2,711     | -       | -                     |
| FEDERAL RESEARCH.....                     | -          | -                   | -              | -                       | 25,110            | -         | 21,769    | 3,341   | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....        | 60         | -                   | 60             | -                       | 8,480             | 387       | 2,708     | 5,385   | -                     |
| BUREAU OF THE CENSUS.....                 | 60         | -                   | 60             | -                       | -                 | -         | -         | -       | -                     |
| NATIONAL BUREAU OF STANDARDS.....         | -          | -                   | -              | -                       | 5,861             | 387       | 1,453     | 4,021   | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....   | -          | -                   | -              | -                       | 2,619             | -         | 1,255     | 1,364   | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....         | 14,158     | 654                 | 9,117          | 4,387                   | 78,133            | 8,092     | 23,606    | 43,495  | 2,940                 |
| DEPARTMENT OF THE ARMY.....               | 2,738      | -                   | 1,582          | 1,156                   | 13,577            | -         | 6,590     | 6,914   | 73                    |
| DEPARTMENT OF THE NAVY.....               | 3,212      | -                   | 3,212          | -                       | 38,131            | 5,292     | 8,214     | 24,625  | -                     |
| DEPARTMENT OF THE AIR FORCE.....          | 4,200      | -                   | 4,200          | -                       | 22,294            | 2,800     | 8,802     | 8,725   | 1,967                 |
| DEFENSE AGENCIES.....                     | 4,008      | 654                 | 123            | 3,231                   | 4,131             | -         | -         | 3,231   | 900                   |
| DEPARTMENT OF ENERGY.....                 | -          | -                   | -              | -                       | 325,147           | -         | 70,549    | 254,598 | -                     |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL    | 31,204     | 12,348              | 7,505          | 11,271                  | 40,036            | -         | 38,189    | 1,847   | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH,      | 19,933     | 12,348              | 7,505          | -                       | 927               | -         | 927       | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....        | 11,271     | -                   | -              | 11,271                  | 39,109            | -         | 37,262    | 1,847   | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....    | -          | -                   | -              | -                       | 10,751            | -         | 8,161     | 1,390   | 1,200                 |
| BUREAU OF MINES.....                      | -          | -                   | -              | -                       | 3,000             | -         | 1,650     | 150     | 1,200                 |
| GEOLOGICAL SURVEY.....                    | -          | -                   | -              | -                       | 7,441             | -         | 6,251     | 1,190   | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY..      | -          | -                   | -              | -                       | 310               | -         | 260       | 50      | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....         | 1,764      | -                   | 1,269          | 495                     | -                 | -         | -         | -       | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....     | 1,764      | -                   | 1,269          | 495                     | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF LABOR, TOTAL.....           | 39         | -                   | 39             | -                       | -                 | -         | -         | -       | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....        | 39         | -                   | 39             | -                       | -                 | -         | -         | -       | -                     |
| OTHER AGENCIES                            |            |                     |                |                         |                   |           |           |         |                       |
| CIVIL SERVICE COMMISSION.....             | 409        | -                   | 409            | -                       | -                 | -         | -         | -       | -                     |
| ENVIRONMENTAL PROTECTION AGENCY.....      | -          | -                   | -              | -                       | 1,100             | -         | 690       | 410     | -                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....   | 1,944      | 1,344               | 100            | 500                     | 284,673           | 172,079   | 10,888    | 94,857  | 6,849                 |
| NATIONAL SCIENCE FOUNDATION.....          | 13,189     | 9,697               | 3,492          | -                       | 191,251           | 45,078    | 59,938    | 86,200  | 35                    |
| SMITHSONIAN INSTITUTION.....              | -          | -                   | -              | -                       | 5,983             | 5,983     | -         | -       | -                     |
| TENNESSEE VALLEY AUTHORITY.....           | -          | -                   | -              | -                       | 2,343             | -         | 2,343     | -       | -                     |
| VETERANS ADMINISTRATION.....              | 1,024      | 1,019               | 5              | -                       | -                 | -         | -         | -       | -                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-38. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                     |                |                             | PHYSICAL SCIENCES |           |           |         |                       |
|---------------------------------------------|------------|---------------------|----------------|-----------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                             | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 74,079     | 28,365              | 25,407         | 20,307                      | 1,067,937         | 268,402   | 266,677   | 517,821 | 15,037                |
| DEPARTMENTS                                 |            |                     |                |                             |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 30         | -                   | 30             | -                           | 32,947            | -         | 28,686    | 4,261   | -                     |
| FOREST SERVICE.....                         | 30         | -                   | 30             | -                           | 2,253             | -         | 1,562     | 691     | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                   | -              | -                           | 30,694            | -         | 27,124    | 3,570   | -                     |
| COOPERATIVE RESEARCH.....                   | -          | -                   | -              | -                           | 2,424             | -         | 2,424     | -       | -                     |
| FEDERAL RESEARCH.....                       | -          | -                   | -              | -                           | 28,270            | -         | 24,700    | 3,570   | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 85         | -                   | 85             | -                           | 9,129             | 453       | 2,754     | 5,922   | -                     |
| BUREAU OF THE CENSUS.....                   | 85         | -                   | 85             | -                           | -                 | -         | -         | -       | -                     |
| NATIONAL BUREAU OF STANDARDS.....           | -          | -                   | -              | -                           | 6,717             | 453       | 1,595     | 4,669   | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | -          | -                   | -              | -                           | 2,412             | -         | 1,159     | 1,253   | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 16,118     | 515                 | 10,006         | 5,597                       | 88,663            | 8,858     | 26,695    | 47,029  | 6,081                 |
| DEPARTMENT OF THE ARMY.....                 | 3,258      | -                   | 1,967          | 1,291                       | 14,135            | -         | 7,348     | 6,688   | 99                    |
| DEPARTMENT OF THE NAVY.....                 | 3,823      | -                   | 3,823          | -                           | 45,185            | 5,814     | 9,729     | 26,642  | 3,000                 |
| DEPARTMENT OF THE AIR FORCE.....            | 4,216      | -                   | 4,216          | -                           | 24,242            | 3,044     | 9,571     | 9,487   | 2,140                 |
| DEFENSE AGENCIES.....                       | 4,821      | 515                 | -              | 4,306                       | 5,101             | -         | 47        | 4,212   | 842                   |
| DEPARTMENT OF ENERGY.....                   | -          | -                   | -              | -                           | 342,054           | -         | 77,144    | 264,910 | -                     |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 36,888     | 14,313              | 9,930          | 12,645                      | 44,434            | -         | 42,359    | 2,075   | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 24,243     | 14,313              | 9,930          | -                           | 564               | -         | 564       | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 12,645     | -                   | -              | 12,645                      | 43,870            | -         | 41,795    | 2,075   | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | -          | -                   | -              | -                           | 12,353            | -         | 9,339     | 1,614   | 1,400                 |
| BUREAU OF MINES.....                        | -          | -                   | -              | -                           | 4,000             | -         | 2,400     | 200     | 1,400                 |
| GEOLOGICAL SURVEY.....                      | -          | -                   | -              | -                           | 8,033             | -         | 6,674     | 1,359   | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | -          | -                   | -              | -                           | 320               | -         | 265       | 55      | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 2,253      | -                   | 688            | 1,565                       | -                 | -         | -         | -       | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 2,253      | -                   | 688            | 1,565                       | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF LABOR, TOTAL.....             | 39         | -                   | 39             | -                           | -                 | -         | -         | -       | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....          | 39         | -                   | 39             | -                           | -                 | -         | -         | -       | -                     |
| OTHER AGENCIES                              |            |                     |                |                             |                   |           |           |         |                       |
| CIVIL SERVICE COMMISSION.....               | 409        | -                   | 409            | -                           | -                 | -         | -         | -       | -                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | -          | -                   | -              | -                           | 1,900             | -         | 1,400     | 500     | -                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 2,135      | 1,535               | 100            | 500                         | 317,965           | 203,260   | 9,857     | 97,324  | 7,524                 |
| NATIONAL SCIENCE FOUNDATION.....            | 15,067     | 10,953              | 4,114          | -                           | 209,416           | 49,436    | 65,762    | 94,186  | 32                    |
| SMITHSONIAN INSTITUTION.....                | -          | -                   | -              | -                           | 6,395             | 6,395     | -         | -       | -                     |
| TENNESSEE VALLEY AUTHORITY.....             | -          | -                   | -              | -                           | 2,681             | -         | 2,681     | -       | -                     |
| VETERANS ADMINISTRATION.....                | 1,055      | 1,049               | 6              | -                           | -                 | -         | -         | -       | -                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-39. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |             |                  |                  |                   | ENVIRONMENTAL SCIENCES |              |             |              |                            |
|---------------------------------------------|---------------|-------------|------------------|------------------|-------------------|------------------------|--------------|-------------|--------------|----------------------------|
|                                             | TOTAL         | BIO-LOGICAL | CLINICAL MEDICAL | MEDICAL SCIENCES | LIFE SCIENCES NEC | TOTAL                  | ATMOS-PHERIC | GEO-LOGICAL | OCEANOGRAPHY | ENVIRONMENTAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 1,020,683     | 795,166     | 34,697           | 162,958          | 27,862            | 456,111                | 149,450      | 180,086     | 115,696      | 10,679                     |
| DEPARTMENTS                                 |               |             |                  |                  |                   |                        |              |             |              |                            |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 144,389       | 142,201     | 2,188            | -                | -                 | 4,384                  | 1,871        | 1,672       | -            | 841                        |
| FOREST SERVICE.....                         | 18,402        | 18,402      | -                | -                | -                 | 2,650                  | 1,129        | 1,521       | -            | -                          |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 125,987       | 123,799     | 2,188            | -                | -                 | 1,734                  | 742          | 151         | -            | 841                        |
| COOPERATIVE RESEARCH.....                   | 33,231        | 31,043      | 2,188            | -                | -                 | 302                    | 302          | -           | -            | -                          |
| FEDERAL RESEARCH.....                       | 92,756        | 92,756      | -                | -                | -                 | 1,432                  | 440          | 151         | -            | 841                        |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 160           | -           | -                | 160              | -                 | 10,857                 | 9,136        | -           | 1,721        | -                          |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 160           | -           | -                | 160              | -                 | -                      | -            | -           | -            | -                          |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -             | -           | -                | -                | -                 | 10,857                 | 9,136        | -           | 1,721        | -                          |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 32,172        | 8,079       | 19,735           | 4,358            | -                 | 52,733                 | 11,111       | 5,113       | 31,257       | 5,252                      |
| DEPARTMENT OF THE ARMY.....                 | 18,262        | 1,955       | 12,667           | 1,640            | -                 | 4,790                  | 3,570        | 1,208       | -            | 12                         |
| DEPARTMENT OF THE NAVY.....                 | 11,512        | 5,011       | 6,501            | -                | -                 | 41,296                 | 2,967        | 2,847       | 30,838       | 4,644                      |
| DEPARTMENT OF THE AIR FORCE.....            | 3,652         | 1,113       | 567              | 1,972            | -                 | 6,228                  | 4,574        | 1,058       | -            | 596                        |
| DEFENSE AGENCIES.....                       | 766           | -           | -                | 766              | -                 | 419                    | -            | -           | 419          | -                          |
| DEPARTMENT OF ENERGY.....                   | 25,821        | 25,821      | -                | -                | -                 | 3,540                  | -            | 3,540       | -            | -                          |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 652,257       | 464,102     | 7,725            | 153,417          | 27,013            | -                      | -            | -           | -            | -                          |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 33,963        | 24,422      | 3,516            | 1,409            | 4,616             | -                      | -            | -           | -            | -                          |
| HEALTH SERVICES ADMINISTRATION.....         | 2,031         | -           | 2,031            | -                | -                 | -                      | -            | -           | -            | -                          |
| HUMAN DEVELOPMENT SERVICES.....             | 2,178         | -           | 2,178            | -                | -                 | -                      | -            | -           | -            | -                          |
| NATIONAL INSTITUTES OF HEALTH.....          | 614,085       | 439,680     | -                | 152,008          | 22,397            | -                      | -            | -           | -            | -                          |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 13,472        | 13,456      | -                | 0                | 0                 | 99,858                 | 80           | 84,144      | 14,806       | 820                        |
| BUREAU OF MINES.....                        | -             | -           | -                | -                | -                 | 320                    | -            | 320         | -            | -                          |
| GEOLOGICAL SURVEY.....                      | -             | -           | -                | -                | -                 | 97,853                 | -            | 83,055      | 14,798       | -                          |
| OFFICE OF THE SECRETARY.....                | -             | -           | -                | -                | -                 | 600                    | -            | -           | -            | 600                        |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 372           | 356         | -                | 0                | 0                 | 1,085                  | 96           | 769         | 0            | 220                        |
| US FISH AND WILDLIFE SERVICE.....           | 13,100        | 13,100      | -                | -                | -                 | -                      | -            | -           | -            | -                          |
| OTHER AGENCIES                              |               |             |                  |                  |                   |                        |              |             |              |                            |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 6,074         | 6,074       | -                | -                | -                 | 761                    | 350          | 411         | -            | -                          |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 16,195        | 13,569      | 268              | 1,517            | 841               | 103,968                | 65,721       | 30,880      | 3,612        | 3,755                      |
| NATIONAL SCIENCE FOUNDATION.....            | 108,237       | 107,115     | -                | 1,122            | -                 | 177,627                | 81,270       | 52,684      | 63,662       | 11                         |
| SMITHSONIAN INSTITUTION.....                | 12,554        | 12,554      | -                | -                | -                 | 2,383                  | 103          | 1,642       | 638          | -                          |
| TENNESSEE VALLEY AUTHORITY.....             | 1,237         | 1,237       | -                | -                | -                 | -                      | -            | -           | -            | -                          |
| VETERANS ADMINISTRATION.....                | 8,115         | 958         | 4,781            | 2,376            | -                 | -                      | -            | -           | -            | -                          |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-40. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |             |                  |                        |                   | ENVIRONMENTAL SCIENCES |             |            |              |                            |
|---------------------------------------------|---------------|-------------|------------------|------------------------|-------------------|------------------------|-------------|------------|--------------|----------------------------|
|                                             | TOTAL         | BIO-LOGICAL | CLINICAL MEDICAL | OTHER MEDICAL SCIENCES | LIFE SCIENCES NEC | TOTAL                  | ATMOSPHERIC | GEOLOGICAL | OCEANOGRAPHY | ENVIRONMENTAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 1,167,334     | 913,170     | 37,489           | 185,286                | 31,389            | 511,909                | 154,398     | 215,641    | 128,513      | 13,357                     |
| DEPARTMENTS                                 |               |             |                  |                        |                   |                        |             |            |              |                            |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 183,165       | 180,712     | 2,453            | -                      | -                 | 5,150                  | 2,144       | 2,009      | -            | 997                        |
| FOREST SERVICE.....                         | 21,238        | 21,238      | -                | -                      | -                 | 3,141                  | 1,337       | 1,804      | -            | -                          |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 161,927       | 159,474     | 2,453            | -                      | -                 | 2,009                  | 807         | 205        | -            | 997                        |
| COOPERATIVE RESEARCH.....                   | 52,226        | 49,773      | 2,453            | -                      | -                 | 339                    | 339         | -          | -            | -                          |
| FEDERAL RESEARCH.....                       | 109,701       | 109,701     | -                | -                      | -                 | 1,670                  | 468         | 205        | -            | 997                        |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 177           | -           | -                | 177                    | -                 | 12,129                 | 9,936       | -          | 2,193        | -                          |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 177           | -           | -                | 177                    | -                 | -                      | -           | -          | -            | -                          |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -             | -           | -                | -                      | -                 | 12,129                 | 9,936       | -          | 2,193        | -                          |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 34,635        | 8,824       | 20,768           | 5,043                  | -                 | 60,727                 | 12,970      | 5,991      | 36,290       | 5,476                      |
| DEPARTMENT OF THE ARMY.....                 | 10,963        | 1,992       | 13,267           | 1,704                  | -                 | 5,604                  | 4,321       | 1,271      | -            | 12                         |
| DEPARTMENT OF THE NAVY.....                 | 12,260        | 5,459       | 8,801            | -                      | -                 | 46,935                 | 3,297       | 3,482      | 35,390       | 4,766                      |
| DEPARTMENT OF THE AIR FORCE.....            | 9,508         | 1,373       | 700              | 2,435                  | -                 | 7,288                  | 5,352       | 1,238      | -            | 698                        |
| DEFENSE AGENCIES.....                       | 904           | -           | -                | 904                    | -                 | 900                    | -           | -          | 900          | -                          |
| DEPARTMENT OF ENERGY.....                   | 25,870        | 25,870      | -                | -                      | -                 | 4,060                  | -           | 4,060      | -            | -                          |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 741,004       | 526,999     | 8,869            | 174,662                | 30,474            | -                      | -           | -          | -            | -                          |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 37,433        | 26,596      | 4,191            | 1,660                  | 4,986             | -                      | -           | -          | -            | -                          |
| HEALTH SERVICES ADMINISTRATION.....         | 2,300         | -           | 2,300            | -                      | -                 | -                      | -           | -          | -            | -                          |
| HUMAN DEVELOPMENT SERVICES.....             | 2,378         | -           | 2,378            | -                      | -                 | -                      | -           | -          | -            | -                          |
| NATIONAL INSTITUTES OF HEALTH.....          | 696,893       | 500,403     | -                | 173,002                | 25,488            | -                      | -           | -          | -            | -                          |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 14,440        | 14,410      | -                | 15                     | 15                | 126,925                | 580         | 109,822    | 14,639       | 1,884                      |
| BUREAU OF MINES.....                        | -             | -           | -                | -                      | -                 | 450                    | 450         | -          | -            | -                          |
| GEOLOGICAL SURVEY.....                      | -             | -           | -                | -                      | -                 | 123,361                | -           | 108,732    | 14,629       | -                          |
| OFFICE OF THE SECRETARY.....                | -             | -           | -                | -                      | -                 | 1,569                  | -           | -          | -            | 1,569                      |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 540           | 510         | -                | 15                     | 15                | 1,545                  | 130         | 1,090      | 10           | 315                        |
| US FISH AND WILDLIFE SERVICE.....           | 13,900        | 13,900      | -                | -                      | -                 | -                      | -           | -          | -            | -                          |
| OTHER AGENCIES                              |               |             |                  |                        |                   |                        |             |            |              |                            |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 6,025         | 6,025       | -                | -                      | -                 | 1,200                  | 700         | 500        | -            | -                          |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 18,815        | 15,909      | 400              | 1,606                  | 900               | 98,847                 | 58,468      | 32,941     | 2,438        | 5,000                      |
| NATIONAL SCIENCE FOUNDATION.....            | 120,640       | 119,348     | -                | 1,298                  | -                 | 200,331                | 69,504      | 58,558     | 72,269       | -                          |
| SMITHSONIAN INSTITUTION.....                | 12,703        | 12,703      | -                | -                      | -                 | 2,540                  | 96          | 1,760      | 684          | -                          |
| TENNESSEE VALLEY AUTHORITY.....             | 1,369         | 1,369       | -                | -                      | -                 | -                      | -           | -          | -            | -                          |
| VETERANS ADMINISTRATION.....                | 8,485         | 1,001       | 4,999            | 2,485                  | -                 | -                      | -           | -          | -            | -                          |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-41. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |             |                  |                        |                   | ENVIRONMENTAL SCIENCES |             |            |              |                            |
|---------------------------------------------|---------------|-------------|------------------|------------------------|-------------------|------------------------|-------------|------------|--------------|----------------------------|
|                                             | TOTAL         | BIO-LOGICAL | CLINICAL MEDICAL | OTHER MEDICAL SCIENCES | LIFE SCIENCES NEC | TOTAL                  | ATMOSPHERIC | GEOLOGICAL | OCEANOGRAPHY | ENVIRONMENTAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 1,299,281     | 1,009,593   | 40,434           | 214,122                | 35,132            | 566,701                | 181,222     | 232,140    | 139,469      | 13,870                     |
| DEPARTMENTS                                 |               |             |                  |                        |                   |                        |             |            |              |                            |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 197,479       | 195,285     | 2,194            | -                      | -                 | 5,090                  | 2,133       | 1,926      | -            | 1,031                      |
| FOREST SERVICE.....                         | 20,513        | 20,513      | -                | -                      | -                 | 3,033                  | 1,291       | 1,742      | -            | -                          |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 176,966       | 174,772     | 2,194            | -                      | -                 | 2,057                  | 842         | 184        | -            | 1,031                      |
| COOPERATIVE RESEARCH.....                   | 63,319        | 61,125      | 2,194            | -                      | -                 | 303                    | 303         | -          | -            | -                          |
| FEDERAL RESEARCH.....                       | 113,647       | 113,647     | -                | -                      | -                 | 1,754                  | 539         | 184        | -            | 1,031                      |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 177           | -           | -                | 177                    | -                 | 15,665                 | 13,752      | 15         | 1,898        | -                          |
| NATIONAL BUREAU OF STANDARDS.....           | -             | -           | -                | -                      | -                 | 15                     | -           | 15         | -            | -                          |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 177           | -           | -                | 177                    | -                 | -                      | -           | -          | -            | -                          |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -             | -           | -                | -                      | -                 | 15,650                 | 13,752      | -          | 1,898        | -                          |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 40,318        | 10,773      | 23,101           | 6,444                  | -                 | 72,325                 | 13,911      | 7,189      | 44,717       | 6,508                      |
| DEPARTMENT OF THE ARMY.....                 | 20,023        | 2,403       | 15,223           | 2,397                  | -                 | 5,744                  | 4,180       | 1,548      | -            | 16                         |
| DEPARTMENT OF THE NAVY.....                 | 13,825        | 6,765       | 7,060            | -                      | -                 | 55,107                 | 3,539       | 4,209      | 41,675       | 5,684                      |
| DEPARTMENT OF THE AIR FORCE.....            | 5,270         | 1,605       | 818              | 2,847                  | -                 | 8,432                  | 6,192       | 1,432      | -            | 808                        |
| DEFENSE AGENCIES.....                       | 1,200         | -           | -                | 1,200                  | -                 | 3,042                  | -           | -          | 3,042        | -                          |
| DEPARTMENT OF ENERGY.....                   | 25,017        | 25,017      | -                | -                      | -                 | 7,730                  | -           | 7,730      | -            | -                          |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 834,926       | 595,034     | 9,593            | 196,092                | 34,207            | -                      | -           | -          | -            | -                          |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 46,270        | 33,720      | 4,915            | 2,018                  | 5,617             | -                      | -           | -          | -            | -                          |
| HEALTH SERVICES ADMINISTRATION.....         | 2,300         | -           | 2,300            | -                      | -                 | -                      | -           | -          | -            | -                          |
| HUMAN DEVELOPMENT SERVICES.....             | 2,378         | -           | 2,378            | -                      | -                 | -                      | -           | -          | -            | -                          |
| NATIONAL INSTITUTES OF HEALTH.....          | 783,978       | 561,314     | -                | 194,074                | 28,590            | -                      | -           | -          | -            | -                          |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 15,550        | 15,510      | -                | 15                     | 25                | 133,089                | 140         | 116,499    | 15,130       | 1,320                      |
| BUREAU OF MINES.....                        | -             | -           | -                | -                      | -                 | 500                    | -           | 500        | -            | -                          |
| GEOLOGICAL SURVEY.....                      | -             | -           | -                | -                      | -                 | 129,999                | -           | 114,879    | 15,120       | -                          |
| OFFICE OF THE SECRETARY.....                | -             | -           | -                | -                      | -                 | 1,000                  | -           | -          | -            | 1,000                      |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 550           | 510         | -                | 15                     | 25                | 1,590                  | 140         | 1,120      | 10           | 320                        |
| US FISH AND WILDLIFE SERVICE.....           | 15,000        | 15,000      | -                | -                      | -                 | -                      | -           | -          | -            | -                          |
| OTHER AGENCIES                              |               |             |                  |                        |                   |                        |             |            |              |                            |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 11,560        | 11,560      | -                | -                      | -                 | 3,400                  | 2,400       | 1,000      | -            | -                          |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 20,467        | 11,379      | 400              | 7,788                  | 900               | 109,442                | 72,668      | 29,644     | 2,130        | 5,000                      |
| NATIONAL SCIENCE FOUNDATION.....            | 130,265       | 129,217     | -                | 1,048                  | -                 | 217,339                | 76,121      | 66,334     | 74,873       | 11                         |
| SMITHSONIAN INSTITUTION.....                | 13,291        | 13,291      | -                | -                      | -                 | 2,621                  | 97          | 1,803      | 721          | -                          |
| TENNESSEE VALLEY AUTHORITY.....             | 1,497         | 1,497       | -                | -                      | -                 | -                      | -           | -          | -            | -                          |
| VETERANS ADMINISTRATION.....                | 8,734         | 1,030       | 5,146            | 2,558                  | -                 | -                      | -           | -          | -            | -                          |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-42. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN ENGINEERING, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |        |                 |                 |                                  |                         |
|---------------------------------------------|-------------|-------------------|--------------------|----------|--------|-----------------|-----------------|----------------------------------|-------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL  | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>MEC |
| TOTAL, ALL AGENCIES.....                    | 303,079     | 47,353            | 9,977              | 15,558   | 10,320 | 46,430          | 30,256          | 120,059                          | 23,126                  |
| DEPARTMENTS                                 |             |                   |                    |          |        |                 |                 |                                  |                         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 11,512      | -                 | -                  | 651      | 2,105  | 101             | 500             | -                                | 8,155                   |
| FOREST SERVICE.....                         | 2,205       | -                 | -                  | 262      | 761    | 26              | 211             | -                                | 945                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 9,307       | -                 | -                  | 389      | 1,344  | 75              | 289             | -                                | 7,210                   |
| COOPERATIVE RESEARCH.....                   | 1,658       | -                 | -                  | -        | -      | -               | -               | -                                | 1,658                   |
| FEDERAL RESEARCH.....                       | 7,649       | -                 | -                  | 389      | 1,344  | 75              | 289             | -                                | 5,552                   |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 2,551       | -                 | -                  | 48       | 360    | 360             | 120             | 717                              | 946                     |
| MARITIME ADMINISTRATION.....                | 1,200       | -                 | -                  | -        | 360    | 120             | 120             | -                                | 600                     |
| NATIONAL BUREAU OF STANDARDS.....           | 1,251       | -                 | -                  | 48       | -      | 140             | -               | 717                              | 346                     |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 100         | -                 | -                  | -        | -      | 100             | -               | -                                | -                       |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 99,858      | 13,499            | 2,825              | 3,354    | 293    | 24,350          | 13,913          | 39,035                           | 2,599                   |
| DEPARTMENT OF THE ARMY.....                 | 16,617      | 864               | -                  | 1,954    | 293    | 5,345           | 3,848           | 2,989                            | 1,324                   |
| DEPARTMENT OF THE NAVY.....                 | 17,679      | 1,197             | -                  | -        | -      | 2,011           | 4,265           | 10,206                           | -                       |
| DEPARTMENT OF THE AIR FORCE.....            | 43,051      | 11,438            | 2,825              | 1,400    | -      | 8,304           | 5,800           | 12,508                           | 776                     |
| DEFENSE AGENCIES.....                       | 22,511      | -                 | -                  | -        | -      | 8,690           | -               | 13,332                           | 489                     |
| DEPARTMENT OF ENERGY.....                   | 59,427      | -                 | -                  | 1,073    | -      | -               | -               | 58,354                           | -                       |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 6,132       | -                 | -                  | -        | -      | -               | 6,132           | -                                | -                       |
| NATIONAL INSTITUTES OF HEALTH.....          | 6,132       | -                 | -                  | -        | -      | -               | 6,132           | -                                | -                       |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 4,282       | -                 | -                  | 72       | 474    | 341             | 2,493           | 308                              | 594                     |
| BUREAU OF MINES.....                        | 900         | -                 | -                  | -        | -      | 200             | 200             | 300                              | 200                     |
| BUREAU OF RECLAMATION.....                  | 110         | -                 | -                  | -        | 40     | 70              | -               | -                                | -                       |
| OFFICE OF THE SECRETARY.....                | 2,576       | -                 | -                  | -        | 216    | 67              | 2,293           | -                                | -                       |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 696         | -                 | -                  | 72       | 218    | 4               | -               | 8                                | 394                     |
| OTHER AGENCIES                              |             |                   |                    |          |        |                 |                 |                                  |                         |
| GENERAL SERVICES ADMINISTRATION.....        | 90          | -                 | -                  | -        | 90     | -               | -               | -                                | -                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 48,803      | 33,266            | 7,152              | 885      | 402    | 1,783           | 365             | 3,843                            | 1,107                   |
| NATIONAL SCIENCE FOUNDATION.....            | 70,424      | 588               | -                  | 9,475    | 6,596  | 19,495          | 6,733           | 17,802                           | 9,735                   |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-43. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN ENGINEERING, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1970 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |        |                 |                 |                                  |                    |
|---------------------------------------------|-------------|-------------------|--------------------|----------|--------|-----------------|-----------------|----------------------------------|--------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL  | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGINEERING<br>MEC |
| TOTAL, ALL AGENCIES.....                    | 345,531     | 58,811            | 11,714             | 18,385   | 11,427 | 49,290          | 24,579          | 131,546                          | 39,779             |
| DEPARTMENTS                                 |             |                   |                    |          |        |                 |                 |                                  |                    |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 13,664      | -                 | -                  | 794      | 2,308  | 75              | 615             | -                                | 9,872              |
| FOREST SERVICE.....                         | 2,612       | -                 | -                  | 311      | 902    | 31              | 249             | -                                | 1,119              |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 11,052      | -                 | -                  | 483      | 1,406  | 44              | 366             | -                                | 8,753              |
| COOPERATIVE RESEARCH.....                   | 1,853       | -                 | -                  | -        | -      | -               | -               | -                                | 1,853              |
| FEDERAL RESEARCH.....                       | 9,199       | -                 | -                  | 483      | 1,406  | 44              | 366             | -                                | 8,900              |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 2,957       | -                 | -                  | 52       | 450    | 402             | 150             | 778                              | 1,125              |
| MARITIME ADMINISTRATION.....                | 1,500       | -                 | -                  | -        | 450    | 150             | 150             | -                                | 750                |
| NATIONAL BUREAU OF STANDARDS.....           | 1,357       | -                 | -                  | 52       | -      | 152             | -               | 778                              | 375                |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 100         | -                 | -                  | -        | -      | 100             | -               | -                                | -                  |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 108,469     | 15,408            | 3,204              | 3,414    | 416    | 25,286          | 14,520          | 41,727                           | 4,494              |
| DEPARTMENT OF THE ARMY.....                 | 18,784      | 1,156             | -                  | 1,826    | 416    | 5,477           | 3,104           | 3,712                            | 3,043              |
| DEPARTMENT OF THE NAVY.....                 | 20,383      | 1,281             | -                  | -        | -      | 2,580           | 4,839           | 11,683                           | -                  |
| DEPARTMENT OF THE AIR FORCE.....            | 48,820      | 12,971            | 3,204              | 1,588    | -      | 9,417           | 6,577           | 14,185                           | 878                |
| DEFENSE AGENCIES.....                       | 20,532      | -                 | -                  | -        | -      | 7,812           | -               | 12,147                           | 573                |
| DEPARTMENT OF ENERGY.....                   | 67,008      | -                 | -                  | 1,299    | -      | -               | -               | 65,709                           | -                  |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 6,982       | -                 | -                  | -        | -      | -               | -               | -                                | 6,982              |
| NATIONAL INSTITUTES OF HEALTH.....          | 6,982       | -                 | -                  | -        | -      | -               | -               | -                                | 6,982              |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 3,780       | -                 | -                  | 100      | 532    | 480             | 1,433           | 365                              | 870                |
| BUREAU OF MINES.....                        | 1,250       | -                 | -                  | -        | -      | 300             | 300             | 350                              | 300                |
| BUREAU OF RECLAMATION.....                  | 97          | -                 | -                  | -        | 22     | 75              | -               | -                                | -                  |
| OFFICE OF THE SECRETARY.....                | 1,433       | -                 | -                  | -        | 200    | 100             | 1,133           | -                                | -                  |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 1,000       | -                 | -                  | 100      | 310    | 5               | -               | 15                               | 570                |
| OTHER AGENCIES                              |             |                   |                    |          |        |                 |                 |                                  |                    |
| GENERAL SERVICES ADMINISTRATION.....        | 1,370       | -                 | -                  | 1,300    | 70     | -               | -               | -                                | -                  |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 80,432      | 42,745            | 8,510              | 888      | 458    | 1,800           | 460             | 4,271                            | 1,300              |
| NATIONAL SCIENCE FOUNDATION.....            | 80,869      | 658               | -                  | 10,538   | 7,193  | 21,247          | 7,401           | 18,696                           | 15,136             |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-44. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN ENGINEERING, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |        |                 |                 |                                  |                         |
|---------------------------------------------|-------------|-------------------|--------------------|----------|--------|-----------------|-----------------|----------------------------------|-------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL  | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 374,308     | 64,888            | 12,844             | 17,192   | 12,046 | 53,134          | 26,656          | 145,353                          | 42,195                  |
| DEPARTMENTS                                 |             |                   |                    |          |        |                 |                 |                                  |                         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 13,556      | -                 | -                  | 777      | 2,518  | 122             | 594             | -                                | 9,545                   |
| FOREST SERVICE.....                         | 2,522       | -                 | -                  | 300      | 871    | 30              | 240             | -                                | 1,081                   |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 11,034      | -                 | -                  | 477      | 1,647  | 92              | 354             | -                                | 8,464                   |
| COOPERATIVE RESEARCH.....                   | 1,662       | -                 | -                  | -        | -      | -               | -               | -                                | 1,662                   |
| FEDERAL RESEARCH.....                       | 9,372       | -                 | -                  | 477      | 1,647  | 92              | 354             | -                                | 6,802                   |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 2,890       | -                 | -                  | 61       | 360    | 398             | 120             | 912                              | 1,039                   |
| MARITIME ADMINISTRATION.....                | 1,200       | -                 | -                  | -        | 360    | 120             | 120             | -                                | 600                     |
| NATIONAL BUREAU OF STANDARDS.....           | 1,590       | -                 | -                  | 61       | -      | 178             | -               | 912                              | 439                     |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 100         | -                 | -                  | -        | -      | 100             | -               | -                                | -                       |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 114,234     | 17,045            | 3,527              | 1,898    | 370    | 26,510          | 16,005          | 47,229                           | 1,650                   |
| DEPARTMENT OF THE ARMY.....                 | 15,037      | 1,229             | -                  | 150      | 370    | 5,974           | 3,135           | 3,872                            | 307                     |
| DEPARTMENT OF THE NAVY.....                 | 22,465      | 1,535             | -                  | -        | -      | 2,539           | 5,628           | 12,763                           | -                       |
| DEPARTMENT OF THE AIR FORCE.....            | 53,754      | 14,281            | 3,527              | 1,748    | -      | 10,369          | 7,242           | 15,618                           | 969                     |
| DEFENSE AGENCIES.....                       | 22,978      | -                 | -                  | -        | -      | 7,628           | -               | 14,976                           | 374                     |
| DEPARTMENT OF ENERGY.....                   | 77,806      | -                 | -                  | 2,032    | -      | 700             | -               | 72,000                           | 3,074                   |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 7,828       | -                 | -                  | -        | -      | -               | -               | -                                | 7,828                   |
| NATIONAL INSTITUTES OF HEALTH.....          | 7,828       | -                 | -                  | -        | -      | -               | -               | -                                | 7,828                   |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 4,025       | -                 | -                  | 110      | 530    | 531             | 1,469           | 515                              | 870                     |
| BUREAU OF MINES.....                        | 1,400       | -                 | -                  | -        | -      | 300             | 300             | 500                              | 300                     |
| BUREAU OF RECLAMATION.....                  | 126         | -                 | -                  | -        | -      | 126             | -               | -                                | -                       |
| OFFICE OF THE SECRETARY.....                | 1,479       | -                 | -                  | -        | 210    | 100             | 1,169           | -                                | -                       |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 1,020       | -                 | -                  | 110      | 320    | 5               | -               | 15                               | 570                     |
| OTHER AGENCIES                              |             |                   |                    |          |        |                 |                 |                                  |                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 66,130      | 47,121            | 9,317              | 963      | 503    | 1,806           | 460             | 4,660                            | 1,300                   |
| NATIONAL SCIENCE FOUNDATION.....            | 87,839      | 722               | -                  | 11,351   | 7,765  | 23,067          | 8,008           | 20,037                           | 16,889                  |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-45. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 79,343                            | 48,419           | 30,669               | 255                                                      | 94,516          | 8,040             | 29,071         | 2,544                     | 15,840         | 39,013                    |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 917                               | 917              | -                    | -                                                        | 15,764          | -                 | 14,413         | -                         | 1,230          | 113                       |
| ECON, STAT & COOPERATIVES SERVICE....  | -                                 | -                | -                    | -                                                        | 3,770           | -                 | 3,355          | -                         | 302            | 113                       |
| FOREST SERVICE.....                    | 603                               | 603              | -                    | -                                                        | 865             | -                 | 498            | -                         | 367            | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 314                               | 314              | -                    | -                                                        | 11,129          | -                 | 10,560         | -                         | 569            | -                         |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 10,752          | -                 | 10,183         | -                         | 569            | -                         |
| FEDERAL RESEARCH.....                  | 314                               | 314              | -                    | -                                                        | 377             | -                 | 377            | -                         | -              | -                         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 155                               | 155              | -                    | -                                                        | 1,200           | -                 | 1,200          | -                         | -              | -                         |
| BUREAU OF THE CENSUS.....              | 155                               | 155              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION    | -                                 | -                | -                    | -                                                        | 1,000           | -                 | 1,000          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | -                                 | -                | -                    | -                                                        | 200             | -                 | 200            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 25,130                            | 15,101           | 9,793                | 244                                                      | 1,399           | -                 | 20             | -                         | 1,379          | -                         |
| DEPARTMENT OF THE ARMY.....            | 3,679                             | 3,455            | 224                  | -                                                        | 146             | -                 | 20             | -                         | 126            | -                         |
| DEPARTMENT OF THE NAVY.....            | 7,982                             | 5,045            | 2,937                | -                                                        | 1,253           | -                 | -              | -                         | 1,253          | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 7,963                             | 6,601            | 1,362                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 5,514                             | -                | 5,270                | 244                                                      | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF ENERGY.....              | 6,839                             | 4,445            | 2,394                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 3,404                             | 3,404            | -                    | -                                                        | 25,819          | 307               | 2,954          | 88                        | 6,399          | 16,071                    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH    | 573                               | 573              | -                    | -                                                        | 6,441           | 307               | 83             | 86                        | 5,098          | 867                       |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 11,880          | -                 | -              | -                         | -              | 11,880                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 2,831                             | 2,831            | -                    | -                                                        | 654             | -                 | -              | -                         | -              | 654                       |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | -                                 | -                | -                    | -                                                        | 2,890           | -                 | 103            | 2                         | 115            | 2,670                     |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 3,954           | -                 | 2,768          | -                         | 1,186          | -                         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 1,411                             | 550              | 850                  | 11                                                       | 320             | 4                 | 124            | 108                       | 44             | 48                        |
| BUREAU OF MINES.....                   | 400                               | 400              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| GEOLOGICAL SURVEY.....                 | 1,000                             | 150              | 850                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 11                                | -                | -                    | 11                                                       | 320             | 4                 | 124            | 108                       | 44             | 48                        |
| DEPARTMENT OF JUSTICE, TOTAL.....      | -                                 | -                | -                    | -                                                        | 4,616           | -                 | 573            | -                         | 3,113          | 930                       |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | -                                 | -                | -                    | -                                                        | 4,616           | -                 | 573            | -                         | 3,113          | 930                       |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 664             | -                 | 591            | -                         | 73             | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 519             | -                 | 446            | -                         | 73             | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN....    | -                                 | -                | -                    | -                                                        | 145             | -                 | 145            | -                         | -              | -                         |
| OTHER AGENCIES                         |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| ACTION.....                            | -                                 | -                | -                    | -                                                        | 51              | -                 | 49             | -                         | 2              | -                         |
| FEDERAL TRADE COMMISSION.....          | -                                 | -                | -                    | -                                                        | 361             | -                 | 361            | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 2,494                             | 2,223            | 271                  | -                                                        | 82              | -                 | 82             | -                         | -              | -                         |
| NATIONAL SCIENCE FOUNDATION.....       | 38,985                            | 21,624           | 17,361               | -                                                        | 34,525          | 3,924             | 8,704          | 2,348                     | 3,600          | 15,949                    |
| SMITHSONIAN INSTITUTION.....           | -                                 | -                | -                    | -                                                        | 9,707           | 3,805             | -              | -                         | -              | 5,902                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-46. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEG | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEG |
| TOTAL, ALL AGENCIES.....               | 88,805                            | 52,554           | 34,886               | 1,365                                                    | 117,159         | 9,989             | 33,683         | 3,141                     | 24,059         | 46,207                    |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 1,095                             | 1,095            | -                    | -                                                        | 17,785          | -                 | 16,246         | -                         | 1,412          | 127                       |
| ECON, STAT & COOPERATIVES SERVICE....  | -                                 | -                | -                    | -                                                        | 4,233           | -                 | 3,767          | -                         | 339            | 127                       |
| FOREST SERVICE.....                    | 715                               | 715              | -                    | -                                                        | 1,026           | -                 | 591            | -                         | 435            | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 380                               | 380              | -                    | -                                                        | 12,526          | -                 | 11,888         | -                         | 638            | -                         |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 12,087          | -                 | 11,449         | -                         | 638            | -                         |
| FEDERAL RESEARCH.....                  | 380                               | 380              | -                    | -                                                        | 439             | -                 | 439            | -                         | -              | -                         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 218                               | 218              | -                    | -                                                        | 2,700           | -                 | 2,700          | -                         | -              | -                         |
| BUREAU OF THE CENSUS.....              | 218                               | 218              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | -                                 | -                | -                    | -                                                        | 2,500           | -                 | 2,500          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP..   | -                                 | -                | -                    | -                                                        | 200             | -                 | 200            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 30,176                            | 15,737           | 13,089               | 1,350                                                    | 1,490           | -                 | 56             | -                         | 1,434          | -                         |
| DEPARTMENT OF THE ARMY.....            | 3,956                             | 3,408            | 548                  | -                                                        | 152             | -                 | 56             | -                         | 96             | -                         |
| DEPARTMENT OF THE NAVY.....            | 8,304                             | 5,209            | 3,095                | -                                                        | 1,338           | -                 | -              | -                         | 1,338          | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 8,590                             | 7,120            | 1,470                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 9,326                             | -                | 7,976                | 1,350                                                    | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF ENERGY.....              | 7,420                             | 4,823            | 2,597                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 3,834                             | 3,834            | -                    | -                                                        | 34,196          | 331               | 3,971          | 123                       | 7,243          | 22,528                    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 614                               | 614              | -                    | -                                                        | 6,970           | 331               | 93             | 89                        | 5,505          | 952                       |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 17,800          | -                 | -              | -                         | -              | 17,800                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 3,220                             | 3,220            | -                    | -                                                        | 748             | -                 | -              | -                         | -              | 748                       |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | -                                 | -                | -                    | -                                                        | 3,328           | -                 | 133            | 34                        | 133            | 3,028                     |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 5,350           | -                 | 3,745          | -                         | 1,605          | -                         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 1,816                             | 778              | 1,023                | 15                                                       | 465             | 5                 | 175            | 155                       | 65             | 65                        |
| BUREAU OF MINES.....                   | 600                               | 600              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| GEOLOGICAL SURVEY.....                 | 1,190                             | 178              | 1,012                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....           | 11                                | -                | 11                   | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 15                                | -                | -                    | 15                                                       | 465             | 5                 | 175            | 155                       | 65             | 65                        |
| DEPARTMENT OF JUSTICE, TOTAL.....      | -                                 | -                | -                    | -                                                        | 12,236          | -                 | 29             | -                         | 9,772          | 2,435                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | -                                 | -                | -                    | -                                                        | 12,236          | -                 | 29             | -                         | 9,772          | 2,435                     |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 636             | -                 | 563            | -                         | 73             | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 521             | -                 | 448            | -                         | 73             | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | -                                 | -                | -                    | -                                                        | 115             | -                 | 115            | -                         | -              | -                         |
| OTHER AGENCIES                         |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| ACTION.....                            | -                                 | -                | -                    | -                                                        | 307             | -                 | 64             | -                         | 243            | -                         |
| FEDERAL TRADE COMMISSION.....          | -                                 | -                | -                    | -                                                        | 454             | -                 | 454            | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 3,059                             | 2,839            | 220                  | -                                                        | 90              | -                 | 88             | -                         | -              | 2                         |
| NATIONAL SCIENCE FOUNDATION.....       | 41,187                            | 23,230           | 17,957               | -                                                        | 35,473          | 4,879             | 9,337          | 2,863                     | 3,817          | 14,577                    |
| SMITHSONIAN INSTITUTION.....           | -                                 | -                | -                    | -                                                        | 11,327          | 4,774             | -              | -                         | -              | 6,553                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-47. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 101,334                           | 60,158           | 39,195               | 1,981                                                    | 120,451         | 11,196            | 34,346         | 3,964                     | 22,040         | 56,945                    |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 1,076                             | 1,076            | -                    | -                                                        | 16,606          | -                 | 15,134         | -                         | 1,341          | 131                       |
| ECON, STAT & COOPERATIVES SERVICE...   | -                                 | -                | -                    | -                                                        | 4,373           | -                 | 3,892          | -                         | 350            | 131                       |
| FOREST SERVICE.....                    | 691                               | 691              | -                    | -                                                        | 991             | -                 | 571            | -                         | 420            | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 385                               | 385              | -                    | -                                                        | 11,242          | -                 | 10,671         | -                         | 571            | -                         |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 10,780          | -                 | 10,209         | -                         | 571            | -                         |
| FEDERAL RESEARCH.....                  | 385                               | 385              | -                    | -                                                        | 462             | -                 | 462            | -                         | -              | -                         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 312                               | 312              | -                    | -                                                        | 2,200           | -                 | 2,200          | -                         | -              | -                         |
| BUREAU OF THE CENSUS.....              | 312                               | 312              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION    | -                                 | -                | -                    | -                                                        | 2,000           | -                 | 2,000          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | -                                 | -                | -                    | -                                                        | 200             | -                 | 200            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 33,831                            | 17,690           | 14,175               | 1,966                                                    | 1,873           | -                 | 51             | -                         | 1,728          | 94                        |
| DEPARTMENT OF THE ARMY.....            | 4,241                             | 3,688            | 553                  | -                                                        | 145             | -                 | 51             | -                         | 94             | -                         |
| DEPARTMENT OF THE NAVY.....            | 9,854                             | 6,139            | 3,715                | -                                                        | 1,634           | -                 | -              | -                         | 1,634          | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 9,486                             | 7,863            | 1,623                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 10,250                            | -                | 8,284                | 1,966                                                    | 94              | -                 | -              | -                         | -              | 94                        |
| DEPARTMENT OF ENERGY.....              | 11,810                            | 7,676            | 4,134                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 4,383                             | 4,383            | -                    | -                                                        | 43,397          | 414               | 4,826          | 142                       | 8,877          | 29,138                    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH    | 769                               | 769              | -                    | -                                                        | 8,612           | 414               | 117            | 111                       | 6,788          | 1,182                     |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 23,800          | -                 | -              | -                         | -              | 23,800                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 3,614                             | 3,614            | -                    | -                                                        | 835             | -                 | -              | -                         | -              | 835                       |
| OFFICE OF ASS'T SECTY FOR HEALTH....   | -                                 | -                | -                    | -                                                        | 3,600           | -                 | 124            | 31                        | 124            | 3,321                     |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 6,550           | -                 | 4,585          | -                         | 1,965          | -                         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 2,074                             | 904              | 1,155                | 15                                                       | 475             | 5                 | 180            | 160                       | 65             | 65                        |
| BUREAU OF MINES.....                   | 700                               | 700              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| GEOLOGICAL SURVEY.....                 | 1,359                             | 204              | 1,155                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 15                                | -                | -                    | 15                                                       | 475             | 5                 | 180            | 160                       | 65             | 65                        |
| DEPARTMENT OF JUSTICE, TOTAL.....      | -                                 | -                | -                    | -                                                        | 6,847           | -                 | -              | -                         | 5,356          | 1,491                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | -                                 | -                | -                    | -                                                        | 6,847           | -                 | -              | -                         | 5,356          | 1,491                     |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 549             | -                 | 476            | -                         | 73             | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 434             | -                 | 361            | -                         | 73             | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN....    | -                                 | -                | -                    | -                                                        | 115             | -                 | 115            | -                         | -              | -                         |
| OTHER AGENCIES                         |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| FEDERAL TRADE COMMISSION.....          | -                                 | -                | -                    | -                                                        | 444             | -                 | 444            | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 3,346                             | 3,126            | 220                  | -                                                        | 90              | -                 | 88             | -                         | -              | 2                         |
| NATIONAL SCIENCE FOUNDATION.....       | 44,502                            | 24,991           | 19,511               | -                                                        | 44,348          | 5,769             | 10,947         | 3,662                     | 4,600          | 19,370                    |
| SMITHSONIAN INSTITUTION.....           | -                                 | -                | -                    | -                                                        | 11,662          | 5,008             | -              | -                         | -              | 6,654                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-48. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | EXTRAMURAL      |                               |                                   |                            |                                    |                                |                                    |        |        |                       |         |
|----------------------------------------|-----------|-----------------|-------------------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------|--------|--------|-----------------------|---------|
|                                        |           | INTRA-MURAL (1) | UNITED STATES AND TERRITORIES |                                   |                            |                                    |                                |                                    |        |        | STATE AND LOCAL GOVTS | FOREIGN |
|                                        |           |                 | INDUS-TRIAL FIRMS             | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS BY NON-PROFIT INSTI-TUTIONS |        |        |                       |         |
| TOTAL, ALL AGENCIES.....               | 5,947,092 | 2,170,839       | 1,426,903                     | 151,733                           | 1,297,850                  | 347,857                            | 387,176                        | 90,197                             | 73,297 | 41,240 |                       |         |
| DEPARTMENTS                            |           |                 |                               |                                   |                            |                                    |                                |                                    |        |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 319,570   | 228,092         | 4,921                         | -                                 | 82,805                     | -                                  | 126                            | 173                                | 622    | 2,831  |                       |         |
| ECON, STAT & COOPERATIVES SERVICE....  | 25,897    | 25,223          | -                             | -                                 | 674                        | -                                  | -                              | -                                  | -      | -      |                       |         |
| FOREST SERVICE.....                    | 59,392    | 57,530          | 188                           | -                                 | 1,419                      | -                                  | -                              | 173                                | 821    | -      |                       |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 234,281   | 145,339         | 4,733                         | -                                 | 80,712                     | -                                  | 126                            | -                                  | 540    | 2,831  |                       |         |
| COOPERATIVE RESEARCH.....              | 78,904    | 2,493           | -                             | -                                 | 76,091                     | -                                  | -                              | -                                  | 320    | -      |                       |         |
| FEDERAL RESEARCH.....                  | 155,377   | 142,846         | 4,733                         | -                                 | 4,621                      | -                                  | 126                            | -                                  | 220    | 2,831  |                       |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 152,970   | 121,491         | 6,342                         | -                                 | 15,325                     | 821                                | 2,159                          | -                                  | 6,420  | 412    |                       |         |
| BUREAU OF THE CENSUS.....              | 1,808     | 1,808           | -                             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 1,500     | 240             | 420                           | -                                 | 165                        | -                                  | 585                            | -                                  | 90     | -      |                       |         |
| MARITIME ADMINISTRATION.....           | 2,500     | 933             | 1,312                         | -                                 | 81                         | -                                  | 174                            | -                                  | -      | -      |                       |         |
| NATIONAL BUREAU OF STANDARDS.....      | 38,036    | 37,526          | 198                           | -                                 | 107                        | -                                  | 193                            | -                                  | -      | 12     |                       |         |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 1,792     | 1,135           | -                             | -                                 | 617                        | -                                  | 40                             | -                                  | -      | -      |                       |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 104,919   | 77,885          | 4,348                         | -                                 | 14,355                     | 821                                | 837                            | -                                  | 6,273  | 400    |                       |         |
| NAT'L TELECOMM & INFO ADMIN.....       | 1,900     | 1,900           | -                             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 515       | 64              | 64                            | -                                 | -                          | -                                  | 330                            | -                                  | 57     | -      |                       |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 1,746,571 | 700,478         | 805,106                       | 442                               | 112,066                    | 79,802                             | 32,824                         | 14,118                             | 105    | 1,630  |                       |         |
| DEPARTMENT OF THE ARMY.....            | 374,863   | 272,764         | 77,717                        | 37                                | 13,902                     | 195                                | 9,342                          | -                                  | 16     | 890    |                       |         |
| DEPARTMENT OF THE NAVY.....            | 262,639   | 151,049         | 39,897                        | -                                 | 9,880                      | 59,991                             | 1,119                          | 673                                | -      | 30     |                       |         |
| DEPARTMENT OF THE AIR FORCE.....       | 750,000   | 190,124         | 495,806                       | -                                 | 57,198                     | 1,121                              | 5,198                          | -                                  | -      | 553    |                       |         |
| DEFENSE AGENCIES.....                  | 357,769   | 86,433          | 191,064                       | 405                               | 30,946                     | 18,495                             | 16,889                         | 13,380                             | -      | 157    |                       |         |
| DEPARTMENTWIDE FUNDS.....              | 1,300     | 108             | 622                           | -                                 | 140                        | -                                  | 276                            | 65                                 | 89     | -      |                       |         |
| DEPARTMENT OF ENERGY.....              | 501,816   | 25,982          | 76,216                        | 68,792                            | 62,827                     | 219,618                            | 20,263                         | 27,434                             | 316    | 368    |                       |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 1,676,503 | 356,186         | 83,752                        | 23,284                            | 869,764                    | 4,827                              | 262,050                        | 1,547                              | 49,324 | 25,769 |                       |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 89,296    | 9,190           | 3,107                         | -                                 | 55,829                     | -                                  | 16,740                         | -                                  | 3,294  | 1,136  |                       |         |
| CENTER FOR DISEASE CONTROL.....        | 55,273    | 38,994          | 4,382                         | -                                 | 5,358                      | -                                  | 4,904                          | -                                  | 146    | 1,489  |                       |         |
| FOOD AND DRUG ADMINISTRATION.....      | 42,872    | 25,295          | 5,418                         | -                                 | 8,425                      | -                                  | 2,193                          | -                                  | 542    | 999    |                       |         |
| HEALTH CARE FINANCING ADMINISTRATION.. | 29,998    | 7,960           | 11,675                        | -                                 | 1,727                      | -                                  | 1,500                          | -                                  | 7,136  | -      |                       |         |
| HEALTH RESOURCES ADMINISTRATION.....   | 7,410     | 296             | -                             | -                                 | 7,114                      | -                                  | -                              | -                                  | -      | -      |                       |         |
| HEALTH SERVICES ADMINISTRATION.....    | 7,490     | 1,752           | 332                           | -                                 | 3,152                      | -                                  | 1,131                          | -                                  | 215    | 868    |                       |         |
| HUMAN DEVELOPMENT SERVICES.....        | 46,533    | 2,456           | 1,153                         | -                                 | 23,260                     | -                                  | 12,036                         | -                                  | 3,559  | 4,069  |                       |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 15,240    | 3,028           | 550                           | -                                 | 5,840                      | -                                  | 4,572                          | -                                  | 1,250  | -      |                       |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 1,317,600 | 251,593         | 52,468                        | 23,284                            | 742,963                    | 4,827                              | 203,450                        | 1,547                              | 20,732 | 16,736 |                       |         |
| OFFICE OF EDUCATION.....               | 11,892    | 563             | 1,167                         | -                                 | 5,749                      | -                                  | 2,872                          | -                                  | 1,441  | 100    |                       |         |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 1,037     | 75              | -                             | -                                 | -                          | -                                  | 962                            | -                                  | -      | -      |                       |         |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 24,599    | 6,942           | 200                           | -                                 | 9,577                      | -                                  | 6,910                          | -                                  | 598    | 372    |                       |         |
| OFFICE OF THE SECRETARY.....           | 16,046    | 47              | 2,255                         | -                                 | 172                        | -                                  | 4,246                          | -                                  | 9,326  | -      |                       |         |
| SOCIAL SECURITY ADMINISTRATION.....    | 11,217    | 7,995           | 1,045                         | -                                 | 558                        | -                                  | 534                            | -                                  | 1,085  | -      |                       |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 32,720    | 14,365          | 6,599                         | -                                 | 3,462                      | -                                  | 8,294                          | -                                  | -      | -      |                       |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 108,604   | 82,614          | 9,967                         | -                                 | 14,288                     | -                                  | 50                             | -                                  | 1,229  | 456    |                       |         |
| BUREAU OF LAND MANAGEMENT.....         | 819       | 489             | -                             | -                                 | 330                        | -                                  | -                              | -                                  | -      | -      |                       |         |
| BUREAU OF MINES.....                   | 46,322    | 40,322          | 6,000                         | -                                 | 2,000                      | -                                  | -                              | -                                  | -      | -      |                       |         |
| BUREAU OF RECLAMATION.....             | 9,162     | 4,819           | 919                           | -                                 | 2,299                      | -                                  | -                              | -                                  | 1,125  | -      |                       |         |
| GEOLOGICAL SURVEY.....                 | 23,280    | 22,505          | 765                           | -                                 | -                          | -                                  | -                              | -                                  | 101    | -      |                       |         |
| HERITAGE CONSERVATION & REC SERVICE..  | 201       | 201             | -                             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| NATIONAL PARK SERVICE.....             | 7,498     | 4,582           | 321                           | -                                 | 2,530                      | -                                  | 50                             | -                                  | 15     | -      |                       |         |
| OFFICE OF THE SECRETARY.....           | 1,360     | 406             | 447                           | -                                 | 51                         | -                                  | -                              | -                                  | -      | 456    |                       |         |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 9,443     | 771             | 1,515                         | -                                 | 7,078                      | -                                  | -                              | -                                  | 79     | -      |                       |         |
| US FISH AND WILDLIFE SERVICE.....      | 8,700     | 8,700           | -                             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 12,484    | 1,720           | 1,100                         | -                                 | 2,652                      | -                                  | 5,809                          | -                                  | 1,203  | -      |                       |         |
| BUREAU OF PRISONS.....                 | 136       | 42              | -                             | -                                 | 48                         | -                                  | -                              | -                                  | 46     | -      |                       |         |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 900       | 400             | 500                           | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| IMMIGRATION & NATURALIZATION SERVICE   | 148       | 6               | 142                           | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 11,300    | 1,272           | 458                           | -                                 | 2,604                      | -                                  | 5,809                          | -                                  | 1,157  | -      |                       |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 18,024    | 8,602           | 4,502                         | -                                 | 3,783                      | 25                                 | 1,084                          | -                                  | 28     | -      |                       |         |
| BUREAU OF LABOR STATISTICS.....        | 896       | 896             | -                             | -                                 | -                          | -                                  | -                              | -                                  | -      | -      |                       |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,835     | 2,176           | 461                           | -                                 | 2,286                      | -                                  | 884                            | -                                  | 28     | -      |                       |         |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 4,446     | 4,371           | -                             | -                                 | 75                         | -                                  | -                              | -                                  | -      | -      |                       |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 3,161     | 847             | 767                           | -                                 | 1,347                      | -                                  | 200                            | -                                  | -      | -      |                       |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | 3,441     | 141             | 3,245                         | -                                 | 55                         | -                                  | -                              | -                                  | -      | -      |                       |         |
| OFFICE OF THE SECRETARY.....           | 245       | 171             | 29                            | -                                 | 20                         | 25                                 | -                              | -                                  | -      | -      |                       |         |
| DEPARTMENT OF STATE, TOTAL.....        | 38,270    | 7,079           | 1,129                         | -                                 | 21,847                     | -                                  | 3,759                          | -                                  | -      | 4,456  |                       |         |
| DEPARTMENTAL FUNDS.....                | 2,065     | 1,062           | 435                           | -                                 | 290                        | -                                  | 190                            | -                                  | -      | 88     |                       |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 36,205    | 6,017           | 694                           | -                                 | 21,557                     | -                                  | 3,569                          | -                                  | -      | 4,368  |                       |         |

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TABLE C-48. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL   | INTRA-MURAL (1) | EXTRAMURAL        |                            |                            |                                    |                                |                                          |       |       | STATE AND LOCAL GOVTS | FOREIGN |
|-----------------------------------------|---------|-----------------|-------------------|----------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|-------|-------|-----------------------|---------|
|                                         |         |                 | INDUS-TRIAL FIRMS | ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS |       |       |                       |         |
| DEPT OF TRANSPORTATION, TOTAL.....      | 51,760  | 16,319          | 23,317            | -                          | 2,430                      | -                                  | 5,064                          | -                                        | 4,630 | -     | -                     |         |
| FEDERAL AVIATION ADMINISTRATION.....    | 4,700   | 1,050           | 3,250             | -                          | 400                        | -                                  | -                              | -                                        | -     | -     | -                     |         |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,300   | 1,024           | 1,700             | -                          | 500                        | -                                  | 1,875                          | -                                        | 201   | -     | -                     |         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 6,600   | 5,140           | 1,460             | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 27,500  | 6,195           | 13,894            | -                          | 1,200                      | -                                  | 3,147                          | -                                        | 3,064 | -     | -                     |         |
| OFFICE OF THE SECRETARY.....            | 4,160   | 1,573           | 1,330             | -                          | 250                        | -                                  | 42                             | -                                        | 965   | -     | -                     |         |
| US COAST GUARD.....                     | 2,500   | 737             | 1,683             | -                          | 80                         | -                                  | -                              | -                                        | -     | -     | -                     |         |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,000   | 600             | -                 | -                          | -                          | -                                  | -                              | -                                        | 400   | -     | -                     |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,140   | 1,790           | -                 | -                          | -                          | -                                  | -                              | 350                                      | -     | -     | -                     |         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 440     | 90              | -                 | -                          | -                          | -                                  | -                              | 350                                      | -     | -     | -                     |         |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,700   | 1,700           | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| OTHER AGENCIES                          |         |                 |                   |                            |                            |                                    |                                |                                          |       |       |                       |         |
| ACTION.....                             | 49      | 14              | -                 | -                          | -                          | -                                  | 35                             | -                                        | -     | -     | -                     |         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,526   | 1,526           | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| APPALACHIAN REGIONAL COMMISSION.....    | 562     | 108             | 374               | -                          | -                          | -                                  | -                              | -                                        | 80    | -     | -                     |         |
| CIVIL AERONAUTICS BOARD.....            | 535     | 535             | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| CIVIL SERVICE COMMISSION.....           | 691     | 691             | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000   | 10              | -                 | -                          | -                          | -                                  | 990                            | -                                        | -     | -     | -                     |         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 3,710   | 2,092           | 415               | -                          | 127                        | -                                  | 1,076                          | -                                        | -     | -     | -                     |         |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 196,956 | 83,590          | 56,630            | -                          | 37,984                     | -                                  | 9,650                          | 685                                      | 5,704 | 2,713 | -                     |         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,043   | 1,691           | 352               | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,665   | 1,482           | -                 | -                          | 183                        | -                                  | -                              | -                                        | -     | -     | -                     |         |
| FEDERAL TRADE COMMISSION.....           | 750     | 750             | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| GENERAL SERVICES ADMINISTRATION.....    | 267     | 39              | 180               | -                          | -                          | -                                  | 68                             | -                                        | -     | -     | -                     |         |
| INTERNATIONAL COMMUNICATION AGENCY....  | 71      | 65              | 6                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| INTERSTATE COMMERCE COMMISSION.....     | 64      | 64              | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| LIBRARY OF CONGRESS.....                | 260     | 260             | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| NATIONAL AERONAUTICS & SPACE ADMIN....  | 792,302 | 409,857         | 325,848           | -                          | 33,071                     | 18,590                             | 3,693                          | 628                                      | 74    | 541   | -                     |         |
| NATIONAL SCIENCE FOUNDATION.....        | 43,400  | 4,111           | 9,627             | 105                        | 29,778                     | 1,959                              | 13,210                         | 150                                      | 3,288 | 1,172 | -                     |         |
| NUCLEAR REGULATORY COMMISSION.....      | 112,291 | 9,358           | 8,209             | 59,110                     | 4,453                      | 22,205                             | 2,837                          | 5,062                                    | 165   | 892   | -                     |         |
| SMALL BUSINESS ADMINISTRATION.....      | 466     | 332             | 134               | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| TENNESSEE VALLEY AUTHORITY.....         | 19,340  | 5,883           | -                 | -                          | 135                        | -                                  | 13,322                         | -                                        | -     | -     | -                     |         |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 1,796   | 30              | 1,349             | -                          | 30                         | 10                                 | 327                            | 50                                       | -     | -     | -                     |         |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,649   | 2,649           | -                 | -                          | -                          | -                                  | -                              | -                                        | -     | -     | -                     |         |
| VETERANS ADMINISTRATION.....            | 83,247  | 80,984          | 828               | -                          | 840                        | -                                  | 486                            | -                                        | 109   | -     | -                     |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-49. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL        |                                   |                            |                                    |                                |                                          |        | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|-----------|-----------------|-------------------|-----------------------------------|----------------------------|------------------------------------|--------------------------------|------------------------------------------|--------|-----------------------|---------|
|                                        |           |                 | INDUS-TRIAL FIRMS | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS |        |                       |         |
| TOTAL, ALL AGENCIES.....               | 6,565,201 | 2,284,550       | 1,682,336         | 180,044                           | 1,453,759                  | 316,920                            | 458,132                        | 50,618                                   | 85,576 | 53,246                |         |
| DEPARTMENTS                            |           |                 |                   |                                   |                            |                                    |                                |                                          |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 355,493   | 256,455         | 100               | -                                 | 94,101                     | -                                  | -                              | -                                        | 455    | 4,382                 |         |
| ECON, STAT & COOPERATIVES SERVICE...   | 29,666    | 28,751          | -                 | -                                 | 915                        | -                                  | -                              | -                                        | -      | -                     |         |
| FOREST SERVICE.....                    | 70,390    | 68,410          | 100               | -                                 | 1,780                      | -                                  | -                              | -                                        | 100    | -                     |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 255,437   | 159,294         | -                 | -                                 | 91,406                     | -                                  | -                              | -                                        | 355    | 4,382                 |         |
| COOPERATIVE RESEARCH.....              | 88,458    | 2,966           | -                 | -                                 | 85,137                     | -                                  | -                              | -                                        | 355    | -                     |         |
| FEDERAL RESEARCH.....                  | 166,979   | 156,328         | -                 | -                                 | 6,269                      | -                                  | -                              | -                                        | -      | 4,382                 |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 166,529   | 131,479         | 6,773             | -                                 | 17,845                     | 176                                | 3,191                          | -                                        | 6,825  | 240                   |         |
| BUREAU OF THE CENSUS.....              | 1,904     | 1,904           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION... | 3,000     | 925             | -                 | -                                 | 700                        | -                                  | 1,000                          | -                                        | 375    | -                     |         |
| MARITIME ADMINISTRATION.....           | 2,900     | 700             | 1,970             | -                                 | 100                        | -                                  | 130                            | -                                        | -      | -                     |         |
| NATIONAL BUREAU OF STANDARDS.....      | 39,690    | 39,390          | -                 | -                                 | 110                        | -                                  | -                              | -                                        | -      | 190                   |         |
| NATIONAL FIRE PREV & CONTROL ADMIN...  | 1,894     | 1,237           | -                 | -                                 | 617                        | -                                  | 40                             | -                                        | -      | -                     |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 114,741   | 85,598          | 4,758             | -                                 | 16,318                     | 176                                | 1,391                          | -                                        | 6,450  | 50                    |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 1,700     | 1,700           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 700       | 25              | 45                | -                                 | -                          | -                                  | 630                            | -                                        | -      | -                     |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 1,813,568 | 653,822         | 959,409           | 815                               | 121,579                    | 28,414                             | 33,831                         | 13,801                                   | 490    | 1,407                 |         |
| DEPARTMENT OF THE ARMY.....            | 377,720   | 273,744         | 79,472            | -                                 | 14,802                     | 100                                | 9,036                          | -                                        | 7      | 559                   |         |
| DEPARTMENT OF THE NAVY.....            | 272,193   | 151,708         | 87,659            | -                                 | 20,161                     | 10,910                             | 1,013                          | 707                                      | -      | 35                    |         |
| DEPARTMENT OF THE AIR FORCE.....       | 770,000   | 142,297         | 557,924           | -                                 | 60,195                     | 1,098                              | 7,885                          | -                                        | -      | 601                   |         |
| DEFENSE AGENCIES.....                  | 386,755   | 85,521          | 231,042           | 815                               | 25,662                     | 16,306                             | 14,448                         | 12,749                                   | -      | 212                   |         |
| DEPARTMENTWIDE FUNDS.....              | 6,900     | 552             | 3,312             | -                                 | 759                        | -                                  | 1,449                          | 345                                      | 483    | -                     |         |
| DEPARTMENT OF ENERGY.....              | 572,478   | 32,007          | 90,499            | 75,180                            | 70,754                     | 244,136                            | 33,538                         | 25,139                                   | 704    | 521                   |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 1,884,148 | 382,007         | 95,099            | 26,155                            | 991,182                    | 5,644                              | 293,143                        | 2,138                                    | 59,427 | 29,353                |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH    | 93,054    | 10,491          | 2,861             | -                                 | 58,230                     | -                                  | 16,944                         | -                                        | 3,417  | 1,111                 |         |
| CENTER FOR DISEASE CONTROL.....        | 62,664    | 40,102          | 4,967             | -                                 | 7,000                      | -                                  | 5,523                          | -                                        | 165    | 4,907                 |         |
| FOOD AND DRUG ADMINISTRATION.....      | 48,600    | 30,057          | 5,865             | -                                 | 8,720                      | -                                  | 2,557                          | -                                        | -      | 1,401                 |         |
| HEALTH CARE FINANCING ADMINISTRATION   | 35,065    | 9,389           | 12,636            | -                                 | 2,174                      | -                                  | 1,260                          | -                                        | 9,606  | -                     |         |
| HEALTH RESOURCES ADMINISTRATION.....   | 5,000     | 200             | -                 | -                                 | 4,800                      | -                                  | -                              | -                                        | -      | -                     |         |
| HEALTH SERVICES ADMINISTRATION.....    | 7,486     | 2,000           | 332               | -                                 | 3,192                      | -                                  | 1,131                          | -                                        | 215    | 616                   |         |
| HUMAN DEVELOPMENT SERVICES.....        | 47,469    | 2,710           | 1,182             | -                                 | 25,557                     | -                                  | 13,370                         | -                                        | 3,820  | 830                   |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 19,200    | 3,309           | 768               | -                                 | 7,296                      | -                                  | 6,252                          | -                                        | 1,575  | -                     |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 1,482,800 | 267,637         | 58,938            | 26,155                            | 852,042                    | 5,344                              | 228,259                        | 1,738                                    | 23,289 | 19,398                |         |
| OFFICE OF EDUCATION.....               | 14,255    | 651             | 2,833             | -                                 | 7,143                      | 300                                | 2,755                          | 400                                      | 73     | 100                   |         |
| OFFICE OF ASS'T SECY FOR EDUCATION...  | 1,042     | 80              | -                 | -                                 | -                          | -                                  | 962                            | -                                        | -      | -                     |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 29,811    | 6,547           | 266               | -                                 | 13,978                     | -                                  | 7,221                          | -                                        | 809    | 990                   |         |
| OFFICE OF THE SECRETARY.....           | 24,650    | 246             | 3,451             | -                                 | 246                        | -                                  | 6,409                          | -                                        | 14,298 | -                     |         |
| SOCIAL SECURITY ADMINISTRATION.....    | 13,052    | 8,588           | 1,000             | -                                 | 804                        | -                                  | 500                            | -                                        | 2,160  | -                     |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 38,100    | 13,400          | 9,910             | -                                 | 3,890                      | -                                  | 10,900                         | -                                        | -      | -                     |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 137,488   | 97,459          | 16,617            | -                                 | 21,659                     | -                                  | 50                             | -                                        | 1,427  | 276                   |         |
| BUREAU OF LAND MANAGEMENT.....         | 1,078     | 462             | -                 | -                                 | 616                        | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF MINES.....                   | 54,765    | 45,765          | 7,000             | -                                 | 2,000                      | -                                  | -                              | -                                        | -      | -                     |         |
| BUREAU OF RECLAMATION.....             | 10,771    | 5,906           | 1,425             | -                                 | 2,121                      | -                                  | -                              | -                                        | 1,319  | -                     |         |
| GEOLOGICAL SURVEY.....                 | 30,573    | 26,546          | 4,027             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| NATIONAL PARK SERVICE.....             | 9,500     | 6,210           | 342               | -                                 | 2,850                      | -                                  | 50                             | -                                        | 48     | -                     |         |
| OFF OF SURF MINING RECLAM & ENFORCE... | 7,800     | 1,700           | -                 | -                                 | 6,100                      | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF THE SECRETARY.....           | 286       | 10              | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | 276                   |         |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 13,415    | 1,560           | 3,823             | -                                 | 7,972                      | -                                  | -                              | -                                        | 60     | -                     |         |
| US FISH AND WILDLIFE SERVICE.....      | 9,300     | 9,300           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 33,750    | 2,717           | 2,354             | -                                 | 4,099                      | -                                  | 23,549                         | 150                                      | 881    | -                     |         |
| BUREAU OF PRISONS.....                 | 746       | 100             | -                 | -                                 | 346                        | -                                  | -                              | -                                        | 300    | -                     |         |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 2,300     | 1,000           | 1,300             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| IMMIGRATION & NATURALIZATION SERVICE   | 304       | 100             | 204               | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 28,400    | 1,417           | 350               | -                                 | 3,053                      | -                                  | 22,849                         | 150                                      | 581    | -                     |         |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2,000     | 100             | 500               | -                                 | 700                        | -                                  | 700                            | -                                        | -      | -                     |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 19,041    | 9,734           | 6,373             | -                                 | 1,834                      | -                                  | 900                            | -                                        | 200    | -                     |         |
| BUREAU OF LABOR STATISTICS.....        | 742       | 742             | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,062     | 2,025           | 961               | -                                 | 1,314                      | -                                  | 562                            | -                                        | 200    | -                     |         |
| EMPLOYMENT STANDARDS ADMINISTRATION... | 5,583     | 5,583           | -                 | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 2,910     | 1,055           | 1,097             | -                                 | 500                        | -                                  | 258                            | -                                        | -      | -                     |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | 4,499     | 199             | 4,300             | -                                 | -                          | -                                  | -                              | -                                        | -      | -                     |         |
| OFFICE OF THE SECRETARY.....           | 245       | 130             | 15                | -                                 | 20                         | -                                  | 80                             | -                                        | -      | -                     |         |
| DEPARTMENT OF STATE, TOTAL.....        | 35,835    | 4,447           | 1,344             | -                                 | 14,881                     | -                                  | 3,651                          | -                                        | -      | 11,512                |         |
| DEPARTMENTAL FUNDS.....                | 4,427     | 1,238           | 509               | -                                 | 340                        | -                                  | 243                            | -                                        | -      | 97                    |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 33,408    | 3,209           | 835               | -                                 | 14,541                     | -                                  | 3,408                          | -                                        | -      | 11,415                |         |

CONTINUED ON NEXT PAGE

TABLE C-49. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL   | INTRA-<br>MURAL (1) | EXTRAMURAL               |                                                |                                      |                                                |                                              |                                                           |       |       | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|-----------------------------------------|---------|---------------------|--------------------------|------------------------------------------------|--------------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|-------|-------|--------------------------------|---------|
|                                         |         |                     | INDUS-<br>TRIAL<br>FIRMS | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS<br>AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |       |       |                                |         |
| DEPT OF TRANSPORTATION, TOTAL.....      | 57,800  | 18,568              | 26,382                   | -                                              | 2,415                                | -                                              | 5,191                                        | -                                                         | -     | 5,244 | -                              | -       |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,700   | 1,720               | 5,735                    | -                                              | 245                                  | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,200   | 1,015               | 1,660                    | -                                              | 500                                  | -                                              | 1,830                                        | -                                                         | -     | 195   | -                              | -       |
| FEDERAL RAILROAD ADMINISTRATION.....    | 8,300   | 6,464               | 1,836                    | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN....  | 28,800  | 6,500               | 14,575                   | -                                              | 1,200                                | -                                              | 3,301                                        | -                                                         | -     | 3,224 | -                              | -       |
| OFFICE OF THE SECRETARY.....            | 5,500   | 1,940               | 1,825                    | -                                              | 350                                  | -                                              | 60                                           | -                                                         | -     | 1,325 | -                              | -       |
| US COAST GUARD.....                     | 1,200   | 329                 | 751                      | -                                              | 120                                  | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,100   | 600                 | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | 500   | -                              | -       |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,292   | 1,200               | 692                      | -                                              | -                                    | -                                              | -                                            | -                                                         | 400   | -     | -                              | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 492     | 92                  | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | 400   | -     | -                              | -       |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,800   | 1,108               | 692                      | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| OTHER AGENCIES                          |         |                     |                          |                                                |                                      |                                                |                                              |                                                           |       |       |                                |         |
| ACTION.....                             | 159     | 14                  | -                        | -                                              | -                                    | -                                              | 145                                          | -                                                         | -     | -     | -                              | -       |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,659   | 1,659               | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| APPALACHIAN REGIONAL COMMISSION.....    | 600     | 100                 | 500                      | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| CIVIL AERONAUTICS BOARD.....            | 734     | 734                 | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| CIVIL SERVICE COMMISSION.....           | 718     | 718                 | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000   | 10                  | -                        | -                                              | -                                    | -                                              | 990                                          | -                                                         | -     | -     | -                              | -       |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 1,763   | 1,395               | 168                      | -                                              | -                                    | -                                              | 200                                          | -                                                         | -     | -     | -                              | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 229,475 | 105,125             | 64,000                   | -                                              | 40,000                               | -                                              | 11,000                                       | 800                                                       | 5,400 | 3,150 | -                              | -       |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,959   | 2,218               | 741                      | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,113   | 1,033               | -                        | -                                              | 80                                   | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| FEDERAL TRADE COMMISSION.....           | 881     | 881                 | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| GENERAL SERVICES ADMINISTRATION.....    | 357     | 41                  | 284                      | -                                              | -                                    | -                                              | 32                                           | -                                                         | -     | -     | -                              | -       |
| INTERNATIONAL COMMUNICATION AGENCY..... | 141     | 104                 | 37                       | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| INTERSTATE COMMERCE COMMISSION.....     | 216     | 184                 | 32                       | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| LIBRARY OF CONGRESS.....                | 270     | 270                 | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN....  | 890,449 | 451,212             | 381,493                  | -                                              | 34,000                               | 18,433                                         | 4,150                                        | 650                                                       | 80    | 431   | -                              | -       |
| NATIONAL SCIENCE FOUNDATION.....        | 60,327  | 4,166               | 10,285                   | -                                              | 28,089                               | 590                                            | 11,702                                       | 198                                                       | 4,100 | 1,197 | -                              | -       |
| NUCLEAR REGULATORY COMMISSION.....      | 132,139 | 10,116              | 7,285                    | 77,894                                         | 6,088                                | 19,447                                         | 3,073                                        | 7,267                                                     | 232   | 737   | -                              | -       |
| TENNESSEE VALLEY AUTHORITY.....         | 27,109  | 8,958               | -                        | -                                              | 204                                  | -                                              | 17,947                                       | -                                                         | -     | -     | -                              | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,145   | 120                 | 1,150                    | -                                              | 205                                  | 80                                             | 455                                          | 75                                                        | -     | 60    | -                              | -       |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,622   | 2,622               | -                        | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| VETERANS ADMINISTRATION.....            | 91,843  | 89,575              | 809                      | -                                              | 854                                  | -                                              | 494                                          | -                                                         | 111   | -     | -                              | -       |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-50. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL                    |                            |                            |                             |                                |                                   |        |        | STATE AND LOCAL GOVTS | FOREIGN |
|----------------------------------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------|-----------------------------|--------------------------------|-----------------------------------|--------|--------|-----------------------|---------|
|                                        |           |                 | UNITED STATES AND TERRITORIES |                            |                            |                             |                                |                                   |        |        |                       |         |
|                                        |           |                 | INDUS-TRIAL FIRMS             | ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTI-TUTIONS | ADMIN BY NON-PROFIT INSTI-TUTIONS |        |        |                       |         |
| TOTAL, ALL AGENCIES.....               | 6,845,938 | 2,367,189       | 1,794,166                     | 200,868                    | 1,521,831                  | 323,126                     | 448,531                        | 47,669                            | 83,919 | 58,639 |                       |         |
| DEPARTMENTS                            |           |                 |                               |                            |                            |                             |                                |                                   |        |        |                       |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 344,683   | 244,536         | 340                           | -                          | 95,463                     | -                           | -                              | -                                 | 654    | 3,690  |                       |         |
| ECON, STAT & COOPERATIVES SERVICE....  | 30,526    | 30,053          | -                             | -                          | 473                        | -                           | -                              | -                                 | -      | -      |                       |         |
| FOREST SERVICE.....                    | 67,985    | 65,793          | 340                           | -                          | 1,517                      | -                           | -                              | -                                 | 335    | -      |                       |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 246,172   | 148,690         | -                             | -                          | 93,473                     | -                           | -                              | -                                 | 319    | 3,690  |                       |         |
| COOPERATIVE RESEARCH.....              | 79,111    | 2,996           | -                             | -                          | 75,796                     | -                           | -                              | -                                 | 319    | -      |                       |         |
| FEDERAL RESEARCH.....                  | 167,061   | 145,694         | -                             | -                          | 17,677                     | -                           | -                              | -                                 | -      | 3,690  |                       |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 189,624   | 153,856         | 4,520                         | -                          | 21,212                     | 245                         | 2,875                          | -                                 | 6,750  | 166    |                       |         |
| BUREAU OF THE CENSUS.....              | 2,283     | 2,283           | -                             | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 3,500     | 560             | 980                           | -                          | 385                        | -                           | 1,365                          | -                                 | 210    | -      |                       |         |
| MARITIME ADMINISTRATION.....           | 2,500     | 750             | 1,650                         | -                          | 100                        | -                           | -                              | -                                 | -      | -      |                       |         |
| NATIONAL BUREAU OF STANDARDS.....      | 47,812    | 47,622          | -                             | -                          | 110                        | -                           | -                              | -                                 | -      | 80     |                       |         |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 2,209     | 1,552           | -                             | -                          | 617                        | -                           | 40                             | -                                 | -      | -      |                       |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 128,320   | 98,689          | 1,850                         | -                          | 20,000                     | 245                         | 910                            | -                                 | 6,540  | 86     |                       |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 2,200     | 2,200           | -                             | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| OFFICE OF MINORITY BUSINESS ENTERP.... | 800       | 200             | 40                            | -                          | -                          | -                           | 560                            | -                                 | -      | -      |                       |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 1,948,344 | 682,297         | 1,056,322                     | 370                        | 129,323                    | 29,122                      | 31,855                         | 17,095                            | 379    | 1,581  |                       |         |
| DEPARTMENT OF THE ARMY.....            | 410,442   | 281,708         | 100,927                       | -                          | 17,448                     | 100                         | 9,456                          | -                                 | 15     | 788    |                       |         |
| DEPARTMENT OF THE NAVY.....            | 233,561   | 161,520         | 98,314                        | -                          | 19,545                     | 11,720                      | 1,364                          | 1,036                             | -      | 62     |                       |         |
| DEPARTMENT OF THE AIR FORCE.....       | 780,000   | 137,141         | 563,902                       | -                          | 67,902                     | 1,398                       | 9,108                          | -                                 | -      | 549    |                       |         |
| DEFENSE AGENCIES.....                  | 459,141   | 101,512         | 290,683                       | 370                        | 23,856                     | 15,904                      | 10,835                         | 15,799                            | -      | 182    |                       |         |
| DEPARTMENTWIDE FUNDS.....              | 5,200     | 416             | 2,496                         | -                          | 572                        | -                           | 1,092                          | 260                               | 364    | -      |                       |         |
| DEPARTMENT OF ENERGY.....              | 606,146   | 33,575          | 107,049                       | 74,509                     | 98,645                     | 242,196                     | 29,498                         | 19,502                            | 815    | 357    |                       |         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 1,903,743 | 380,949         | 95,618                        | 26,204                     | 1,012,994                  | 5,641                       | 292,854                        | 1,799                             | 58,842 | 26,842 |                       |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 116,281   | 11,137          | 3,731                         | -                          | 74,588                     | -                           | 21,342                         | -                                 | 4,257  | 1,226  |                       |         |
| CENTER FOR DISEASE CONTROL.....        | 63,075    | 41,526          | 5,000                         | -                          | 7,200                      | -                           | 5,051                          | -                                 | 184    | 4,114  |                       |         |
| FOOD AND DRUG ADMINISTRATION.....      | 49,147    | 29,370          | 6,156                         | -                          | 9,164                      | -                           | 2,682                          | -                                 | -      | 1,775  |                       |         |
| HEALTH CARE FINANCING ADMINISTRATION   | 38,552    | 10,409          | 13,878                        | -                          | 2,313                      | -                           | 1,542                          | -                                 | 10,410 | -      |                       |         |
| HEALTH SERVICES ADMINISTRATION.....    | 7,720     | 2,000           | 332                           | -                          | 3,192                      | -                           | 1,131                          | -                                 | 215    | 850    |                       |         |
| HUMAN DEVELOPMENT SERVICES.....        | 51,444    | 2,747           | 1,355                         | -                          | 25,945                     | -                           | 13,808                         | -                                 | 4,099  | 3,490  |                       |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 23,100    | 3,552           | 924                           | -                          | 9,009                      | -                           | 7,721                          | -                                 | 1,894  | -      |                       |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 1,474,800 | 263,384         | 56,042                        | 26,204                     | 861,925                    | 5,641                       | 221,022                        | 1,799                             | 22,277 | 16,506 |                       |         |
| OFFICE OF EDUCATION.....               | 16,727    | 742             | 3,889                         | -                          | 8,349                      | -                           | 3,574                          | -                                 | 73     | 100    |                       |         |
| OFFICE OF ASS'T SECY FOR EDUCATION..   | 1,042     | 80              | -                             | -                          | -                          | -                           | 962                            | -                                 | -      | -      |                       |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 26,321    | 6,530           | 248                           | -                          | 10,304                     | -                           | 7,703                          | -                                 | 755    | 781    |                       |         |
| OFFICE OF THE SECRETARY.....           | 20,450    | 205             | 2,863                         | -                          | 205                        | -                           | 5,316                          | -                                 | 11,861 | -      |                       |         |
| SOCIAL SECURITY ADMINISTRATION.....    | 15,084    | 9,267           | 1,200                         | -                          | 800                        | -                           | 1,000                          | -                                 | 2,817  | -      |                       |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 36,268    | 13,400          | 7,968                         | -                          | 3,900                      | -                           | 11,000                         | -                                 | -      | -      |                       |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 129,965   | 98,868          | 13,337                        | -                          | 17,050                     | -                           | 50                             | -                                 | 660    | -      |                       |         |
| BUREAU OF LAND MANAGEMENT.....         | 1,035     | 430             | -                             | -                          | 605                        | -                           | -                              | -                                 | -      | -      |                       |         |
| BUREAU OF MINES.....                   | 50,665    | 42,665          | 6,000                         | -                          | 2,000                      | -                           | -                              | -                                 | -      | -      |                       |         |
| BUREAU OF RECLAMATION.....             | 6,156     | 3,341           | 788                           | -                          | 1,505                      | -                           | -                              | -                                 | 522    | -      |                       |         |
| GEOLOGICAL SURVEY.....                 | 34,096    | 32,097          | 1,999                         | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| NATIONAL PARK SERVICE.....             | 10,000    | 6,550           | 300                           | -                          | 3,030                      | -                           | 50                             | -                                 | 70     | -      |                       |         |
| OFF OF SURF MINING RECLAM & ENFORCE..  | 2,700     | 2,000           | -                             | -                          | 700                        | -                           | -                              | -                                 | -      | -      |                       |         |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 15,313    | 1,785           | 4,250                         | -                          | 9,210                      | -                           | -                              | -                                 | 68     | -      |                       |         |
| US FISH AND WILDLIFE SERVICE.....      | 10,000    | 10,000          | -                             | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 22,031    | 2,390           | 1,325                         | -                          | 3,955                      | -                           | 12,783                         | 450                               | 1,128  | -      |                       |         |
| BUREAU OF PRISONS.....                 | 1,331     | 174             | -                             | -                          | 831                        | -                           | -                              | -                                 | 326    | -      |                       |         |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 900       | 400             | 500                           | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| IMMIGRATION & NATURALIZATION SERVICE   | 100       | 25              | 75                            | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN....   | 17,700    | 1,691           | 250                           | -                          | 2,424                      | -                           | 12,083                         | 450                               | 602    | -      |                       |         |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2,000     | 100             | 500                           | -                          | 700                        | -                           | 700                            | -                                 | -      | -      |                       |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 22,889    | 9,988           | 8,977                         | -                          | 2,829                      | -                           | 995                            | -                                 | 100    | -      |                       |         |
| BUREAU OF LABOR STATISTICS.....        | 860       | 860             | -                             | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,285     | 2,000           | 1,004                         | -                          | 1,594                      | -                           | 587                            | -                                 | 100    | -      |                       |         |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 5,593     | 5,593           | -                             | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 2,935     | 1,055           | 1,122                         | -                          | 500                        | -                           | 258                            | -                                 | -      | -      |                       |         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | 6,546     | 246             | 6,300                         | -                          | -                          | -                           | -                              | -                                 | -      | -      |                       |         |
| OFFICE OF THE SECRETARY.....           | 1,670     | 234             | 551                           | -                          | 735                        | -                           | 150                            | -                                 | -      | -      |                       |         |
| DEPARTMENT OF STATE, TOTAL.....        | 51,772    | 6,739           | 1,973                         | -                          | 22,181                     | -                           | 2,715                          | -                                 | -      | 18,164 |                       |         |
| DEPARTMENTAL FUNDS.....                | 2,254     | 1,150           | 473                           | -                          | 315                        | -                           | 226                            | -                                 | -      | 90     |                       |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 49,518    | 5,589           | 1,500                         | -                          | 21,866                     | -                           | 2,489                          | -                                 | -      | 18,074 |                       |         |

CONTINUED ON NEXT PAGE



TABLE C-90. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                   | TOTAL   | INTRA-<br>MURAL (1) | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                                |                                      |                                                |                                              |                                                           |       |       | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|------------------------------------------|---------|---------------------|---------------------------------------------|------------------------------------------------|--------------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|-------|-------|--------------------------------|---------|
|                                          |         |                     | INDUS-<br>TRIAL<br>FIRMS                    | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS<br>AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN<br>BY NON-<br>PROFIT<br>INSTI-<br>TUTIONS |       |       |                                |         |
| DEPT OF TRANSPORTATION, TOTAL.....       | 60,100  | 18,894              | 29,392                                      | -                                              | 2,090                                | -                                              | 5,996                                        | -                                                         | 4,188 | -     | -                              | -       |
| FEDERAL AVIATION ADMINISTRATION.....     | 7,400   | 1,645               | 5,485                                       | -                                              | 270                                  | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....      | 5,700   | 1,115               | 1,840                                       | -                                              | 500                                  | -                                              | 2,030                                        | -                                                         | 215   | -     | -                              | -       |
| FEDERAL RAILROAD ADMINISTRATION.....     | 6,800   | 5,295               | 1,505                                       | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....  | 31,000  | 7,019               | 15,742                                      | -                                              | 1,200                                | -                                              | 3,566                                        | -                                                         | 3,473 | -     | -                              | -       |
| OFFICE OF THE SECRETARY.....             | 2,420   | 1,120               | 1,300                                       | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE   | 2,040   | 940                 | 1,100                                       | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| US COAST GUARD.....                      | 3,600   | 1,060               | 2,420                                       | -                                              | 120                                  | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| URBAN MASS TRANSPORTATION ADMIN.....     | 1,200   | 700                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | 500   | -     | -                              | -       |
| DEPARTMENT OF THE TREASURY, TOTAL.....   | 2,650   | 1,509               | 681                                         | -                                              | -                                    | -                                              | -                                            | -                                                         | 460   | -     | -                              | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS     | 550     | 90                  | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | 460   | -     | -                              | -       |
| BUREAU OF ENGRAVING AND PRINTING.....    | 2,100   | 1,419               | 681                                         | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| OTHER AGENCIES                           |         |                     |                                             |                                                |                                      |                                                |                                              |                                                           |       |       |                                |         |
| ACTION.....                              | 3,882   | 41                  | -                                           | -                                              | -                                    | -                                              | 3,841                                        | -                                                         | -     | -     | -                              | -       |
| ADVISORY COMM ON INTERGOV'TL RELATIONS   | 1,664   | 1,664               | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| APPALACHIAN REGIONAL COMMISSION.....     | 600     | 100                 | 500                                         | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| CIVIL AERONAUTICS BOARD.....             | 836     | 836                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| CIVIL SERVICE COMMISSION.....            | 718     | 718                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| COMMUNITY SERVICES ADMINISTRATION.....   | 1,000   | 101                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| CONSUMER PRODUCT SAFETY COMMISSION.....  | 2,050   | 1,990               | 210                                         | -                                              | -                                    | -                                              | -                                            | -                                                         | 990   | -     | -                              | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....     | 219,240 | 96,261              | 64,000                                      | -                                              | 40,279                               | -                                              | 10,000                                       | 1,000                                                     | 5,000 | 2,700 | -                              | -       |
| FEDERAL COMMUNICATIONS COMMISSION.....   | 3,365   | 2,364               | 1,001                                       | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| FEDERAL HOME LOAN BANK BOARD.....        | 1,316   | 1,176               | -                                           | -                                              | 140                                  | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| FEDERAL TRADE COMMISSION.....            | 875     | 875                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| GENERAL SERVICES ADMINISTRATION.....     | 384     | 52                  | 300                                         | -                                              | -                                    | -                                              | 32                                           | -                                                         | -     | -     | -                              | -       |
| INTERNATIONAL COMMUNICATION AGENCY.....  | 100     | 100                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| INTERSTATE COMMERCE COMMISSION.....      | 65      | 35                  | 30                                          | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| LIBRARY OF CONGRESS.....                 | 270     | 270                 | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....  | 931,961 | 487,587             | 279,537                                     | -                                              | 34,000                               | 25,332                                         | 4,345                                        | 650                                                       | 80    | 430   | -                              | -       |
| NATIONAL SCIENCE FOUNDATION.....         | 65,950  | 5,030               | 11,725                                      | 140                                            | 30,788                               | 415                                            | 11,310                                       | 155                                                       | 4,000 | 1,587 | -                              | -       |
| NUCLEAR REGULATORY COMMISSION.....       | 155,030 | 12,147              | 7,020                                       | 99,645                                         | 5,585                                | 20,055                                         | 2,695                                        | 6,448                                                     | 413   | 1,022 | -                              | -       |
| SMALL BUSINESS ADMINISTRATION.....       | 55      | 5                   | 50                                          | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| TENNESSEE VALLEY AUTHORITY.....          | 41,837  | 17,867              | -                                           | -                                              | 212                                  | -                                              | 23,758                                       | -                                                         | -     | -     | -                              | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY...  | 2,931   | 170                 | 1,491                                       | -                                              | 340                                  | 120                                            | 600                                          | 110                                                       | -     | 100   | -                              | -       |
| U.S. INTERNATIONAL TRADE COMMISSION..... | 2,666   | 2,666               | -                                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -     | -     | -                              | -       |
| VETERANS ADMINISTRATION.....             | 90,868  | 88,624              | 800                                         | -                                              | 845                                  | -                                              | 489                                          | -                                                         | 110   | -     | -                              | -       |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-51. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY DETAILED FIELD OF SCIENCE:  
FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| FIELD OF SCIENCE                            | ACTUAL, 1977 | ESTIMATES |           |
|---------------------------------------------|--------------|-----------|-----------|
|                                             |              | 1978      | 1979      |
| TOTAL, ALL FIELDS.....                      | 5,947,092    | 6,565,201 | 6,845,938 |
| LIFE SCIENCES, TOTAL.....                   | 1,998,701    | 2,215,593 | 2,207,639 |
| BIOLOGICAL.....                             | 714,155      | 780,803   | 775,425   |
| CLINICAL MEDICAL.....                       | 838,820      | 933,991   | 933,627   |
| OTHER MEDICAL SCIENCES.....                 | 375,087      | 421,251   | 416,844   |
| LIFE SCIENCES, NEC.....                     | 72,639       | 79,548    | 81,743    |
| PSYCHOLOGY, TOTAL.....                      | 104,888      | 114,060   | 126,193   |
| BIOLOGICAL ASPECTS.....                     | 35,278       | 38,204    | 42,638    |
| SOCIAL ASPECTS.....                         | 58,230       | 63,516    | 72,279    |
| PSYCHOLOGICAL SCIENCES, NEC.....            | 11,380       | 12,340    | 11,276    |
| PHYSICAL SCIENCES, TOTAL.....               | 636,748      | 717,854   | 750,791   |
| ASTRONOMY.....                              | 5,840        | 7,946     | 8,222     |
| CHEMISTRY.....                              | 188,230      | 221,523   | 233,107   |
| PHYSICS.....                                | 393,363      | 424,441   | 427,005   |
| PHYSICAL SCIENCES, NEC.....                 | 49,315       | 63,944    | 82,457    |
| ENVIRONMENTAL SCIENCES, TOTAL.....          | 464,929      | 499,869   | 562,802   |
| ATMOSPHERIC SCIENCES.....                   | 175,178      | 174,655   | 191,107   |
| GEOLOGICAL SCIENCES.....                    | 96,780       | 119,123   | 130,446   |
| OCEANOGRAPHY.....                           | 81,698       | 77,830    | 85,487    |
| ENVIRONMENTAL SCIENCES, NEC.....            | 111,293      | 128,261   | 135,762   |
| MATHEMATICS & COMPUTER SCIENCES, TOTAL..... | 96,994       | 109,127   | 129,015   |
| MATHEMATICS.....                            | 44,822       | 48,298    | 52,378    |
| COMPUTER SCIENCES.....                      | 47,803       | 53,879    | 65,441    |
| MATHEMATICS & COMPUTER SCIENCES, NEC.....   | 4,369        | 6,950     | 11,196    |
| ENGINEERING, TOTAL.....                     | 2,122,833    | 2,319,464 | 2,416,943 |
| AERONAUTICAL.....                           | 619,930      | 669,302   | 710,106   |
| ASTRONAUTICAL.....                          | 219,501      | 223,814   | 233,315   |
| CHEMICAL.....                               | 91,117       | 98,511    | 88,399    |
| CIVIL.....                                  | 115,245      | 121,630   | 123,975   |
| ELECTRICAL.....                             | 272,971      | 321,611   | 360,909   |
| MECHANICAL.....                             | 147,436      | 148,175   | 151,312   |
| METALLURGY & MATERIALS.....                 | 194,202      | 208,779   | 176,759   |
| ENGINEERING, NEC.....                       | 462,431      | 527,642   | 572,168   |
| SOCIAL SCIENCES, TOTAL.....                 | 348,826      | 412,879   | 428,417   |
| ANTHROPOLOGY.....                           | 4,339        | 6,561     | 6,359     |
| ECONOMICS.....                              | 114,323      | 137,236   | 141,912   |
| POLITICAL SCIENCE.....                      | 5,935        | 7,935     | 7,621     |
| SOCIOLOGY.....                              | 36,321       | 57,360    | 56,311    |
| SOCIAL SCIENCES, NEC.....                   | 187,908      | 203,787   | 216,214   |
| OTHER SCIENCES, NEC.....                    | 173,173      | 176,355   | 244,138   |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-52. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | LIFE SCIENCES | PSY-<br>CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL SCIENCES | OTHER SCIENCES<br>NEC |
|---------------------------------------------|-----------|---------------|-----------------|-------------------|-----------------------------|---------------------------------------------------|------------------|-----------------|-----------------------|
| TOTAL, ALL AGENCIES.....                    | 5,947,092 | 1,998,701     | 104,888         | 636,748           | 464,929                     | 96,994                                            | 2,122,833        | 348,826         | 173,173               |
| DEPARTMENTS                                 |           |               |                 |                   |                             |                                                   |                  |                 |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 319,570   | 189,787       | 59              | 35,976            | 9,720                       | 2,928                                             | 32,678           | 48,422          | -                     |
| ECON. STAT & COOPERATIVES SERVICE....       | 25,897    | -             | -               | -                 | -                           | 1,438                                             | -                | 24,459          | -                     |
| FOREST SERVICE.....                         | 59,392    | 35,681        | 59              | 2,851             | 7,066                       | 713                                               | 8,314            | 4,928           | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 234,281   | 154,326       | -               | 33,125            | 2,654                       | 777                                               | 24,364           | 19,035          | -                     |
| COOPERATIVE RESEARCH.....                   | 78,904    | 54,217        | -               | 3,945             | 494                         | -                                                 | 2,705            | 17,543          | -                     |
| FEDERAL RESEARCH.....                       | 155,377   | 100,109       | -               | 29,180            | 2,160                       | 777                                               | 21,659           | 1,492           | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 152,970   | 49,790        | 158             | 19,608            | 50,795                      | 4,748                                             | 21,301           | 5,826           | 744                   |
| BUREAU OF THE CENSUS.....                   | 1,808     | -             | 151             | -                 | -                           | 1,138                                             | -                | 475             | 44                    |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....    | 1,500     | -             | -               | -                 | -                           | -                                                 | -                | 1,500           | -                     |
| MARITIME ADMINISTRATION.....                | 2,500     | -             | -               | -                 | -                           | -                                                 | 2,337            | 163             | -                     |
| NATIONAL BUREAU OF STANDARDS.....           | 38,036    | -             | -               | 19,036            | 106                         | 3,507                                             | 15,387           | -               | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 1,792     | -             | 7               | -                 | -                           | 103                                               | 1,682            | -               | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 104,919   | 49,790        | -               | 572               | 50,689                      | -                                                 | 795              | 3,073           | -                     |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 1,900     | -             | -               | -                 | -                           | -                                                 | 1,100            | 100             | 700                   |
| OFFICE OF MINORITY BUSINESS ENTERP.....     | 515       | -             | -               | -                 | -                           | -                                                 | -                | 515             | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,746,571 | 115,404       | 45,788          | 217,182           | 73,119                      | 51,059                                            | 1,140,915        | 24,185          | 78,919                |
| DEPARTMENT OF THE ARMY.....                 | 374,863   | 69,365        | 17,828          | 68,732            | 5,722                       | 5,751                                             | 182,572          | 22,647          | 2,246                 |
| DEPARTMENT OF THE NAVY.....                 | 262,639   | 9,037         | 8,121           | 62,147            | 18,110                      | 23,478                                            | 141,746          | -               | -                     |
| DEPARTMENT OF THE AIR FORCE.....            | 750,000   | 31,910        | 15,353          | 9,717             | 25,634                      | 555                                               | 666,831          | -               | -                     |
| DEFENSE AGENCIES.....                       | 357,769   | 4,904         | 4,276           | 76,432            | 23,653                      | 21,118                                            | 149,523          | 1,263           | 76,600                |
| DEPARTMENTWIDE FUNDS.....                   | 1,300     | 188           | 210             | 154               | -                           | 157                                               | 243              | 275             | 73                    |
| DEPARTMENT OF ENERGY.....                   | 501,816   | 89,042        | -               | 256,943           | 81,225                      | -                                                 | 59,920           | 2,686           | 10,000                |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 1,676,503 | 1,351,958     | 37,975          | 18,741            | -                           | 4,968                                             | 30,922           | 161,446         | 70,493                |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 89,296    | 42,987        | 28,142          | 40                | -                           | 1,363                                             | -                | 14,386          | 2,378                 |
| CENTER FOR DISEASE CONTROL.....             | 55,273    | 55,273        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| FOOD AND DRUG ADMINISTRATION.....           | 42,872    | 42,872        | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| HEALTH CARE FINANCING ADMINISTRATION.....   | 29,998    | -             | -               | -                 | -                           | -                                                 | -                | 29,998          | -                     |
| HEALTH RESOURCES ADMINISTRATION.....        | 7,410     | -             | -               | -                 | -                           | -                                                 | -                | 7,410           | -                     |
| HEALTH SERVICES ADMINISTRATION.....         | 7,490     | 7,490         | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| HUMAN DEVELOPMENT SERVICES.....             | 46,533    | 14,631        | 1,454           | -                 | -                           | 183                                               | 6,489            | 23,776          | -                     |
| NATIONAL INSTITUTE OF EDUCATION.....        | 15,240    | -             | -               | -                 | -                           | -                                                 | -                | 15,240          | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,317,600 | 1,188,705     | 8,379           | 18,701            | -                           | 3,422                                             | 24,433           | 6,217           | 67,743                |
| OFFICE OF EDUCATION.....                    | 11,892    | -             | -               | -                 | -                           | -                                                 | -                | 11,892          | -                     |
| OFFICE OF ASS'T SECY FOR EDUCATION.....     | 1,037     | -             | -               | -                 | -                           | -                                                 | -                | 1,037           | -                     |
| OFFICE OF ASS'T SECY FOR HEALTH.....        | 24,599    | -             | -               | -                 | -                           | -                                                 | -                | 24,227          | 372                   |
| OFFICE OF THE SECRETARY.....                | 16,046    | -             | -               | -                 | -                           | -                                                 | -                | 16,046          | -                     |
| SOCIAL SECURITY ADMINISTRATION.....         | 11,217    | -             | -               | -                 | -                           | -                                                 | -                | 11,217          | -                     |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 32,720    | -             | -               | -                 | -                           | -                                                 | 3,775            | 28,945          | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 108,604   | 15,317        | 320             | 4,430             | 29,641                      | 1,956                                             | 51,740           | 4,598           | 602                   |
| BUREAU OF LAND MANAGEMENT.....              | 819       | 767           | -               | -                 | -                           | -                                                 | -                | 52              | -                     |
| BUREAU OF MINES.....                        | 48,322    | -             | -               | 1,300             | 2,550                       | 1,250                                             | 43,122           | 100             | -                     |
| BUREAU OF RECLAMATION.....                  | 9,162     | 500           | -               | -                 | 6,523                       | -                                                 | 1,855            | 284             | -                     |
| GEOLOGICAL SURVEY.....                      | 23,280    | -             | -               | 2,653             | 17,742                      | 610                                               | 2,275            | -               | -                     |
| HERITAGE CONSERVATION & REC SERVICE.....    | 20        | -             | -               | -                 | -                           | -                                                 | -                | 20              | -                     |
| NATIONAL PARK SERVICE.....                  | 7,498     | 3,830         | -               | 27                | 502                         | -                                                 | -                | 2,897           | 242                   |
| OFFICE OF THE SECRETARY.....                | 1,360     | -             | -               | -                 | 456                         | -                                                 | 904              | -               | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 9,443     | 1,520         | 320             | 450               | 1,868                       | 96                                                | 3,584            | 1,245           | 360                   |
| US FISH AND WILDLIFE SERVICE.....           | 8,700     | 8,700         | -               | -                 | -                           | -                                                 | -                | -               | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 12,484    | 172           | 665             | -                 | -                           | -                                                 | 1,048            | 10,599          | -                     |
| BUREAU OF PRISONS.....                      | 136       | -             | -               | -                 | -                           | -                                                 | -                | 136             | -                     |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 900       | -             | -               | -                 | -                           | -                                                 | 900              | -               | -                     |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 148       | -             | -               | -                 | -                           | -                                                 | 148              | -               | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 11,300    | 172           | 665             | -                 | -                           | -                                                 | -                | 10,463          | -                     |
| DEPARTMENT OF LABOR, TOTAL.....             | 18,024    | -             | 233             | -                 | -                           | -                                                 | -                | 17,791          | -                     |
| BUREAU OF LABOR STATISTICS.....             | 896       | -             | -               | -                 | -                           | -                                                 | -                | 896             | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....          | 5,835     | -             | 233             | -                 | -                           | -                                                 | -                | 5,602           | -                     |
| EMPLOYMENT STANDARDS ADMINISTRATION.....    | 4,446     | -             | -               | -                 | -                           | -                                                 | -                | 4,446           | -                     |
| LABOR-MANAGEMENT SERVICES ADMIN.....        | 3,161     | -             | -               | -                 | -                           | -                                                 | -                | 3,161           | -                     |
| OCCUPATIONAL SAFETY & HEALTH ADMIN.....     | 3,441     | -             | -               | -                 | -                           | -                                                 | -                | 3,441           | -                     |
| OFFICE OF THE SECRETARY.....                | 245       | -             | -               | -                 | -                           | -                                                 | -                | 245             | -                     |
| DEPARTMENT OF STATE, TOTAL.....             | 38,270    | 22,661        | -               | -                 | 7,161                       | -                                                 | -                | 8,448           | -                     |
| DEPARTMENTAL FUNDS.....                     | 2,065     | 171           | -               | -                 | 171                         | -                                                 | -                | 1,723           | -                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 36,205    | 22,490        | -               | -                 | 6,990                       | -                                                 | -                | 6,725           | -                     |

CONTINUED ON NEXT PAGE

TABLE C-52. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977

- CONTINUED

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL   | LIFE SCIENCES | PSY-CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|-----------------------------------------|---------|---------------|-------------|-------------------|-----------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| DEPT OF TRANSPORTATION, TOTAL.....      | 51,760  | 2,135         | 66          | -                 | 420                         | 1,327                                             | 46,870           | 942                | -                        |
| FEDERAL AVIATION ADMINISTRATION.....    | 4,700   | -             | -           | -                 | -                           | -                                                 | 4,700            | -                  | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,300   | -             | -           | -                 | -                           | -                                                 | 5,300            | -                  | -                        |
| FEDERAL RAILROAD ADMINISTRATION.....    | 6,600   | -             | -           | -                 | -                           | 25                                                | 6,568            | 71                 | -                        |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN....  | 27,500  | 2,135         | -           | -                 | -                           | 1,302                                             | 23,839           | 224                | -                        |
| OFFICE OF THE SECRETARY.....            | 4,160   | -             | 66          | -                 | 13                          | -                                                 | 3,402            | 679                | -                        |
| US COAST GUARD.....                     | 2,500   | -             | -           | -                 | 407                         | -                                                 | 2,061            | 32                 | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,000   | -             | -           | -                 | -                           | -                                                 | 1,000            | -                  | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,140   | -             | -           | 1,236             | -                           | -                                                 | 544              | -                  | 360                      |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 440     | -             | -           | 80                | -                           | -                                                 | -                | -                  | 360                      |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,700   | -             | -           | 1,156             | -                           | -                                                 | 544              | -                  | -                        |
| OTHER AGENCIES                          |         |               |             |                   |                             |                                                   |                  |                    |                          |
| ACTION.....                             | 49      | -             | -           | -                 | -                           | -                                                 | -                | 49                 | -                        |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,526   | -             | -           | -                 | -                           | -                                                 | -                | 1,526              | -                        |
| APPALACHIAN REGIONAL COMMISSION.....    | 562     | -             | -           | -                 | -                           | -                                                 | -                | 562                | -                        |
| CIVIL AERONAUTICS BOARD.....            | 535     | -             | -           | -                 | -                           | -                                                 | -                | 535                | -                        |
| CIVIL SERVICE COMMISSION.....           | 691     | -             | 691         | -                 | -                           | -                                                 | -                | -                  | -                        |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000   | -             | -           | -                 | -                           | -                                                 | -                | 1,000              | -                        |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 3,710   | 1,423         | -           | -                 | -                           | -                                                 | 2,030            | 257                | -                        |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 196,956 | 70,686        | -           | 48,694            | 5,444                       | 3,100                                             | 65,715           | 3,315              | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,043   | -             | -           | -                 | -                           | 60                                                | 1,053            | 930                | -                        |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,665   | -             | -           | -                 | -                           | -                                                 | -                | 1,665              | -                        |
| FEDERAL TRADE COMMISSION.....           | 750     | -             | -           | -                 | -                           | -                                                 | -                | 750                | -                        |
| GENERAL SERVICES ADMINISTRATION.....    | 287     | -             | -           | -                 | -                           | -                                                 | 208              | 50                 | 29                       |
| INTERNATIONAL COMMUNICATION AGENCY..... | 71      | -             | -           | -                 | -                           | -                                                 | 71               | -                  | -                        |
| INTERSTATE COMMERCE COMMISSION.....     | 64      | -             | -           | -                 | -                           | 42                                                | -                | 22                 | -                        |
| LIBRARY OF CONGRESS.....                | 260     | -             | -           | -                 | -                           | -                                                 | -                | -                  | 260                      |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 792,302 | 12,861        | 10,332      | 24,564            | 201,624                     | 23,423                                            | 517,320          | 533                | 1,645                    |
| NATIONAL SCIENCE FOUNDATION.....        | 63,400  | 5,085         | -           | 4,980             | 4,733                       | 3,279                                             | 15,711           | 19,491             | 10,121                   |
| NUCLEAR REGULATORY COMMISSION.....      | 112,291 | -             | -           | -                 | -                           | -                                                 | 112,291          | -                  | -                        |
| SMALL BUSINESS ADMINISTRATION.....      | 466     | -             | -           | -                 | -                           | -                                                 | -                | 466                | -                        |
| TENNESSEE VALLEY AUTHORITY.....         | 19,340  | 1,109         | -           | 2,075             | 887                         | -                                                 | 15,269           | -                  | -                        |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 1,796   | -             | -           | 319               | 160                         | 104                                               | 75               | 1,138              | -                        |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,649   | -             | -           | -                 | -                           | -                                                 | -                | 2,649              | -                        |
| VETERANS ADMINISTRATION.....            | 83,247  | 71,209        | 8,601       | -                 | -                           | -                                                 | 3,377            | -                  | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-53. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | LIFE<br>SCIENCES | PSY-<br>CHOLOGY | PHYSICAL<br>SCIENCES | ENVIRON-<br>MENTAL<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|----------------------------------------|-----------|------------------|-----------------|----------------------|--------------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| TOTAL, ALL AGENCIES.....               | 6,965,201 | 2,215,593        | 114,060         | 717,854              | 499,869                        | 109,127                                           | 2,319,464        | 412,879            | 176,355                  |
| DEPARTMENTS                            |           |                  |                 |                      |                                |                                                   |                  |                    |                          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 355,493   | 210,344          | 70              | 39,161               | 11,249                         | 3,187                                             | 36,156           | 55,326             | -                        |
| ECON. STAT & COOPERATIVES SERVICE....  | 29,666    | -                | -               | -                    | -                              | 1,507                                             | -                | 28,159             | -                        |
| FOREST SERVICE.....                    | 70,390    | 42,022           | 70              | 3,379                | 8,376                          | 845                                               | 9,856            | 5,842              | -                        |
| SCIENCE AND EDUCATION ADMINISTRATION.. | 255,437   | 168,322          | -               | 35,782               | 2,873                          | 835                                               | 26,300           | 21,325             | -                        |
| COOPERATIVE RESEARCH.....              | 66,458    | 60,736           | -               | 4,423                | 552                            | -                                                 | 3,023            | 19,722             | -                        |
| FEDERAL RESEARCH.....                  | 166,979   | 107,584          | -               | 31,359               | 2,321                          | 835                                               | 23,277           | 1,603              | -                        |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 166,529   | 56,093           | 169             | 21,056               | 53,624                         | 5,181                                             | 21,064           | 8,396              | 944                      |
| BUREAU OF THE CENSUS.....              | 1,904     | -                | 161             | -                    | -                              | 1,220                                             | -                | 479                | 44                       |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 3,000     | -                | -               | -                    | -                              | -                                                 | -                | 3,000              | -                        |
| MARITIME ADMINISTRATION.....           | 2,900     | -                | -               | -                    | -                              | -                                                 | 2,610            | 290                | -                        |
| NATIONAL BUREAU OF STANDARDS.....      | 39,690    | -                | -               | 20,487               | 116                            | 3,850                                             | 15,237           | -                  | -                        |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 1,894     | -                | 8               | -                    | -                              | 111                                               | 1,775            | -                  | -                        |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 114,741   | 56,095           | -               | 569                  | 53,508                         | -                                                 | 642              | 3,927              | -                        |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 1,700     | -                | -               | -                    | -                              | -                                                 | 800              | -                  | 900                      |
| OFFICE OF MINORITY BUSINESS ENTERP..   | 700       | -                | -               | -                    | -                              | -                                                 | -                | 700                | -                        |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 1,813,568 | 117,661          | 47,851          | 226,480              | 74,305                         | 58,571                                            | 1,190,995        | 23,438             | 74,267                   |
| DEPARTMENT OF THE ARMY.....            | 377,720   | 68,646           | 19,472          | 83,261               | 7,124                          | 10,458                                            | 165,353          | 20,567             | 2,839                    |
| DEPARTMENT OF THE NAVY.....            | 272,193   | 9,754            | 8,432           | 62,809               | 17,424                         | 23,840                                            | 149,934          | -                  | -                        |
| DEPARTMENT OF THE AIR FORCE.....       | 770,000   | 32,766           | 15,762          | 9,976                | 26,317                         | 570                                               | 684,615          | -                  | -                        |
| DEFENSE AGENCIES.....                  | 386,755   | 5,535            | 3,081           | 69,606               | 23,440                         | 22,875                                            | 189,782          | 1,422              | 71,014                   |
| DEPARTMENT-WIDE FUNDS.....             | 6,900     | 966              | 1,104           | 828                  | -                              | 828                                               | 1,311            | 1,449              | 414                      |
| DEPARTMENT OF ENERGY.....              | 572,478   | 96,601           | -               | 304,354              | 93,460                         | 549                                               | 68,939           | 2,575              | 6,000                    |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 1,884,148 | 1,515,797        | 41,135          | 21,098               | -                              | 5,397                                             | 34,569           | 186,223            | 79,929                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 93,054    | 44,326           | 30,118          | 43                   | -                              | 1,342                                             | -                | 15,373             | 1,852                    |
| CENTER FOR DISEASE CONTROL.....        | 62,664    | 62,664           | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| FOOD AND DRUG ADMINISTRATION.....      | 48,600    | 48,600           | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| HEALTH CARE FINANCING ADMINISTRATION.. | 35,065    | -                | -               | -                    | -                              | -                                                 | -                | 35,065             | -                        |
| HEALTH RESOURCES ADMINISTRATION.....   | 5,000     | -                | -               | -                    | -                              | -                                                 | -                | 5,000              | -                        |
| HEALTH SERVICES ADMINISTRATION.....    | 7,486     | 7,486            | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| HUMAN DEVELOPMENT SERVICES.....        | 47,469    | 14,983           | 1,586           | -                    | -                              | 200                                               | 7,078            | 23,622             | -                        |
| NATIONAL INSTITUTE OF EDUCATION.....   | 19,200    | -                | -               | -                    | -                              | -                                                 | -                | 19,200             | -                        |
| NATIONAL INSTITUTES OF HEALTH.....     | 1,482,800 | 1,337,738        | 9,431           | 21,055               | -                              | 3,855                                             | 27,491           | 6,999              | 76,231                   |
| OFFICE OF EDUCATION.....               | 14,255    | -                | -               | -                    | -                              | -                                                 | -                | 14,255             | -                        |
| OFFICE OF ASS'T SECY FOR EDUCATION..   | 1,042     | -                | -               | -                    | -                              | -                                                 | -                | 1,042              | -                        |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 29,811    | -                | -               | -                    | -                              | -                                                 | -                | 27,965             | 1,846                    |
| OFFICE OF THE SECRETARY.....           | 24,650    | -                | -               | -                    | -                              | -                                                 | -                | 24,650             | -                        |
| SOCIAL SECURITY ADMINISTRATION.....    | 13,052    | -                | -               | -                    | -                              | -                                                 | -                | 13,052             | -                        |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 38,100    | -                | -               | -                    | -                              | -                                                 | 4,796            | 33,304             | -                        |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 137,488   | 17,969           | 350             | 6,113                | 45,408                         | 2,914                                             | 57,984           | 5,755              | 995                      |
| BUREAU OF LAND MANAGEMENT.....         | 1,078     | 1,046            | -               | -                    | -                              | -                                                 | -                | 32                 | -                        |
| BUREAU OF MINES.....                   | 94,765    | -                | -               | 1,400                | 3,400                          | 1,750                                             | 48,100           | 115                | -                        |
| BUREAU OF RECLAMATION.....             | 10,771    | 404              | -               | -                    | 8,181                          | -                                                 | 1,965            | 221                | -                        |
| GEOLOGICAL SURVEY.....                 | 30,573    | -                | -               | 4,179                | 22,396                         | 1,054                                             | 2,944            | -                  | -                        |
| NATIONAL PARK SERVICE.....             | 9,500     | 4,724            | -               | 34                   | 635                            | -                                                 | -                | 3,787              | 320                      |
| OFF OF SURF MINING RECLAM & ENFORCE..  | 7,800     | -                | -               | -                    | 7,800                          | -                                                 | -                | -                  | -                        |
| OFFICE OF THE SECRETARY.....           | 286       | -                | -               | -                    | 286                            | -                                                 | -                | -                  | -                        |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 13,415    | 2,445            | 350             | 500                  | 2,710                          | 110                                               | 4,975            | 1,600              | 675                      |
| US FISH AND WILDLIFE SERVICE.....      | 9,300     | 9,300            | -               | -                    | -                              | -                                                 | -                | -                  | -                        |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 33,750    | 607              | 2,761           | -                    | -                              | 75                                                | 2,747            | 27,560             | -                        |
| BUREAU OF PRISONS.....                 | 746       | -                | -               | -                    | -                              | -                                                 | -                | 746                | -                        |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 2,300     | -                | 300             | -                    | -                              | -                                                 | 2,000            | -                  | -                        |
| IMMIGRATION & NATURALIZATION SERVICE   | 304       | -                | -               | -                    | -                              | -                                                 | 304              | -                  | -                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 28,400    | 607              | 2,461           | -                    | -                              | 75                                                | 443              | 24,814             | -                        |
| OFFICE OF THE ATTORNEY GENERAL.....    | 2,000     | -                | -               | -                    | -                              | -                                                 | -                | 2,000              | -                        |
| DEPARTMENT OF LABOR, TOTAL.....        | 19,041    | -                | 253             | -                    | -                              | -                                                 | -                | 18,788             | -                        |
| BUREAU OF LABOR STATISTICS.....        | 742       | -                | -               | -                    | -                              | -                                                 | -                | 742                | -                        |
| EMPLOYMENT AND TRAINING ADMIN.....     | 5,062     | -                | 253             | -                    | -                              | -                                                 | -                | 4,809              | -                        |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 5,583     | -                | -               | -                    | -                              | -                                                 | -                | 5,583              | -                        |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 2,910     | -                | -               | -                    | -                              | -                                                 | -                | 2,910              | -                        |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | 4,499     | -                | -               | -                    | -                              | -                                                 | -                | 4,499              | -                        |
| OFFICE OF THE SECRETARY.....           | 245       | -                | -               | -                    | -                              | -                                                 | -                | 245                | -                        |
| DEPARTMENT OF STATE, TOTAL.....        | 35,835    | 14,854           | -               | -                    | 1,972                          | -                                                 | 550              | 18,459             | -                        |
| DEPARTMENTAL FUNDS.....                | 4,427     | 3                | -               | -                    | 224                            | -                                                 | -                | 2,200              | -                        |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 33,408    | 14,851           | -               | -                    | 1,748                          | -                                                 | 550              | 16,259             | -                        |

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TABLE C-53. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL   | LIFE<br>SCIENCES | PSY-<br>CHOLOGY | PHYSICAL<br>SCIENCES | ENVIRON-<br>MENTAL<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NCL |
|-----------------------------------------|---------|------------------|-----------------|----------------------|--------------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| DEPT OF TRANSPORTATION, TOTAL.....      | 57,800  | 2,235            | 87              | -                    | 213                            | 1,394                                             | 52,715           | 1,156              | -                        |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,700   | -                | -               | -                    | -                              | -                                                 | 7,700            | -                  | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,200   | -                | -               | -                    | -                              | -                                                 | 5,200            | -                  | -                        |
| FEDERAL RAILROAD ADMINISTRATION.....    | 8,300   | -                | -               | -                    | -                              | 31                                                | 8,262            | 7                  | -                        |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 48,800  | 2,235            | -               | -                    | -                              | 1,363                                             | 24,966           | 236                | -                        |
| OFFICE OF THE SECRETARY.....            | 5,500   | -                | 87              | -                    | 18                             | -                                                 | 4,498            | 897                | -                        |
| US COAST GUARD.....                     | 1,200   | -                | -               | -                    | 195                            | -                                                 | 989              | 16                 | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,100   | -                | -               | -                    | -                              | -                                                 | 1,100            | -                  | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,292   | -                | -               | 1,304                | -                              | -                                                 | 576              | -                  | 412                      |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 492     | -                | -               | 80                   | -                              | -                                                 | -                | -                  | 412                      |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,800   | -                | -               | 1,224                | -                              | -                                                 | 576              | -                  | -                        |
| OTHER AGENCIES                          |         |                  |                 |                      |                                |                                                   |                  |                    |                          |
| ACTION.....                             | 159     | -                | -               | -                    | -                              | -                                                 | -                | 159                | -                        |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,659   | -                | -               | -                    | -                              | -                                                 | -                | 1,659              | -                        |
| APPALACHIAN REGIONAL COMMISSION.....    | 600     | -                | -               | -                    | -                              | -                                                 | -                | 600                | -                        |
| CIVIL AERONAUTICS BOARD.....            | 734     | -                | -               | -                    | -                              | -                                                 | -                | 734                | -                        |
| CIVIL SERVICE COMMISSION.....           | 718     | -                | 718             | -                    | -                              | -                                                 | -                | -                  | -                        |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000   | -                | -               | -                    | -                              | -                                                 | -                | 1,000              | -                        |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 1,763   | 1,033            | -               | -                    | -                              | -                                                 | 437              | 293                | -                        |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 229,475 | 81,961           | -               | 61,684               | 5,934                          | 3,091                                             | 73,005           | 3,600              | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 2,959   | -                | -               | -                    | -                              | 102                                               | 1,363            | 1,494              | -                        |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,113   | -                | -               | -                    | -                              | -                                                 | -                | 1,113              | -                        |
| FEDERAL TRADE COMMISSION.....           | 881     | -                | -               | -                    | -                              | -                                                 | -                | 881                | -                        |
| GENERAL SERVICES ADMINISTRATION.....    | 357     | -                | -               | -                    | -                              | -                                                 | 257              | 59                 | 41                       |
| INTERNATIONAL COMMUNICATION AGENCY..... | 141     | -                | -               | -                    | -                              | -                                                 | 141              | -                  | -                        |
| INTERSTATE COMMERCE COMMISSION.....     | 216     | -                | -               | -                    | -                              | 50                                                | -                | 166                | -                        |
| LIBRARY OF CONGRESS.....                | 270     | -                | -               | -                    | -                              | -                                                 | -                | -                  | 270                      |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 890,449 | 17,453           | 11,176          | 26,187               | 209,452                        | 25,701                                            | 596,317          | 513                | 1,650                    |
| NATIONAL SCIENCE FOUNDATION.....        | 60,327  | 3,062            | -               | 5,350                | 2,988                          | 2,719                                             | 18,464           | 15,936             | 11,788                   |
| NUCLEAR REGULATORY COMMISSION.....      | 132,139 | -                | -               | -                    | -                              | -                                                 | 132,139          | -                  | -                        |
| TENNESSEE VALLEY AUTHORITY.....         | 27,109  | 1,200            | -               | 2,594                | 916                            | -                                                 | 22,272           | -                  | 59                       |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,145   | -                | -               | 273                  | 348                            | 196                                               | 258              | 1,070              | -                        |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,622   | -                | -               | -                    | -                              | -                                                 | -                | 2,622              | -                        |
| VETERANS ADMINISTRATION.....            | 91,843  | 78,633           | 9,490           | -                    | -                              | -                                                 | 3,720            | -                  | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-34. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | LIFE SCIENCES | PSY-CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|---------------------------------------------|-----------|---------------|-------------|-------------------|-----------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| TOTAL, ALL AGENCIES.....                    | 6,845,938 | 2,207,639     | 126,193     | 750,791           | 542,802                     | 129,015                                           | 2,416,943        | 428,417            | 244,138                  |
| DEPARTMENTS                                 |           |               |             |                   |                             |                                                   |                  |                    |                          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 344,683   | 202,584       | 68          | 38,594            | 10,907                      | 3,158                                             | 35,518           | 53,854             | -                        |
| ECON. STAT & COOPERATIVES SERVICE.....      | 30,526    | -             | -           | -                 | -                           | 1,507                                             | -                | 29,019             | -                        |
| FOREST SERVICE.....                         | 67,985    | 40,587        | 68          | 3,264             | 8,090                       | 816                                               | 9,518            | 5,642              | -                        |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 246,172   | 161,997       | -           | 35,330            | 2,817                       | 835                                               | 26,000           | 19,193             | -                        |
| COOPERATIVE RESEARCH.....                   | 79,111    | 54,359        | -           | 3,956             | 495                         | -                                                 | 2,712            | 17,589             | -                        |
| FEDERAL RESEARCH.....                       | 167,061   | 107,638       | -           | 31,374            | 2,322                       | 835                                               | 23,288           | 1,604              | -                        |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 189,624   | 60,484        | 203         | 20,528            | 62,140                      | 13,274                                            | 22,137           | 9,605              | 1,253                    |
| BUREAU OF THE CENSUS.....                   | 2,283     | -             | 193         | -                 | -                           | 1,463                                             | -                | 574                | 53                       |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....    | 3,500     | -             | -           | -                 | -                           | -                                                 | -                | 3,500              | -                        |
| MARITIME ADMINISTRATION.....                | 2,500     | -             | -           | -                 | -                           | -                                                 | 2,250            | 250                | -                        |
| NATIONAL BUREAU OF STANDARDS.....           | 47,812    | -             | -           | 19,932            | 121                         | 11,674                                            | 16,085           | -                  | -                        |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 4,209     | -             | 10          | -                 | -                           | 137                                               | 2,062            | -                  | -                        |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 128,320   | 60,484        | -           | 596               | 62,019                      | -                                                 | 740              | 4,481              | -                        |
| NAT'L TELECOMM & INFO ADMIN.....            | 2,200     | -             | -           | -                 | -                           | -                                                 | 1,000            | -                  | 1,200                    |
| OFFICE OF MINORITY BUSINESS ENTERP.....     | 800       | -             | -           | -                 | -                           | -                                                 | -                | 800                | -                        |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,948,344 | 116,870       | 52,551      | 250,228           | 80,056                      | 66,990                                            | 1,229,295        | 28,368             | 124,286                  |
| DEPARTMENT OF THE ARMY.....                 | 410,442   | 67,897        | 24,540      | 83,144            | 8,325                       | 9,459                                             | 188,078          | 25,561             | 3,438                    |
| DEPARTMENT OF THE NAVY.....                 | 293,561   | 10,093        | 9,514       | 62,667            | 18,512                      | 28,414                                            | 164,361          | -                  | -                        |
| DEPARTMENT OF THE AIR FORCE.....            | 780,000   | 33,186        | 15,967      | 10,126            | 26,659                      | 577                                               | 693,485          | -                  | -                        |
| DEFENSE AGENCIES.....                       | 459,141   | 4,966         | 1,698       | 93,667            | 26,560                      | 27,916                                            | 182,383          | 1,415              | 120,536                  |
| DEPARTMENTWIDE FUNDS.....                   | 5,200     | 728           | 832         | 624               | -                           | 624                                               | 988              | 1,092              | 312                      |
| DEPARTMENT OF ENERGY.....                   | 606,146   | 89,100        | -           | 310,228           | 92,689                      | 1,000                                             | 84,912           | 3,500              | 24,717                   |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 1,903,743 | 1,521,892     | 48,765      | 20,987            | -                           | 5,458                                             | 34,426           | 192,778            | 79,437                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 116,281   | 54,953        | 37,800      | 54                | -                           | 1,428                                             | -                | 19,215             | 2,831                    |
| CENTER FOR DISEASE CONTROL.....             | 63,075    | 63,075        | -           | -                 | -                           | -                                                 | -                | -                  | -                        |
| FOOD AND DRUG ADMINISTRATION.....           | 49,147    | 49,147        | -           | -                 | -                           | -                                                 | -                | -                  | -                        |
| HEALTH CARE FINANCING ADMINISTRATION.....   | 38,552    | -             | -           | -                 | -                           | -                                                 | -                | -                  | -                        |
| HEALTH SERVICES ADMINISTRATION.....         | 7,720     | 7,720         | -           | -                 | -                           | -                                                 | -                | -                  | -                        |
| HUMAN DEVELOPMENT SERVICES.....             | 51,444    | 16,471        | 1,586       | -                 | -                           | 200                                               | 7,078            | 26,109             | -                        |
| NATIONAL INSTITUTE OF EDUCATION.....        | 23,100    | -             | -           | -                 | -                           | -                                                 | -                | 23,100             | -                        |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,474,800 | 1,330,560     | 9,379       | 20,933            | -                           | 3,830                                             | 27,368           | 6,959              | 75,825                   |
| OFFICE OF EDUCATION.....                    | 16,727    | -             | -           | -                 | -                           | -                                                 | -                | 16,727             | -                        |
| OFFICE OF ASS'T SECTY FOR EDUCATION.....    | 1,042     | -             | -           | -                 | -                           | -                                                 | -                | 1,042              | -                        |
| OFFICE OF ASS'T SECTY FOR HEALTH.....       | 26,321    | -             | -           | -                 | -                           | -                                                 | -                | 25,540             | 781                      |
| OFFICE OF THE SECRETARY.....                | 20,450    | -             | -           | -                 | -                           | -                                                 | -                | 20,450             | -                        |
| SOCIAL SECURITY ADMINISTRATION.....         | 15,084    | -             | -           | -                 | -                           | -                                                 | -                | 15,084             | -                        |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 30,268    | -             | -           | -                 | -                           | -                                                 | 3,905            | 32,363             | -                        |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 129,965   | 19,173        | 375         | 6,792             | 39,776                      | 3,002                                             | 53,540           | 6,228              | 1,079                    |
| BUREAU OF LAND MANAGEMENT.....              | 1,035     | 1,025         | -           | -                 | -                           | -                                                 | -                | 10                 | -                        |
| BUREAU OF MINES.....                        | 50,665    | -             | -           | 1,600             | 3,350                       | 1,700                                             | 43,900           | 115                | -                        |
| BUREAU OF RECLAMATION.....                  | 6,156     | 367           | -           | -                 | 4,721                       | -                                                 | 898              | 170                | -                        |
| GEOLOGICAL SURVEY.....                      | 34,096    | -             | -           | 4,586             | 25,246                      | 1,182                                             | 3,082            | -                  | -                        |
| NATIONAL PARK SERVICE.....                  | 10,000    | 4,931         | -           | 36                | 669                         | -                                                 | -                | 4,013              | 351                      |
| OFF OF SURF MINING RECLAM & ENFORCE.....    | 2,700     | -             | -           | -                 | 2,700                       | -                                                 | -                | -                  | -                        |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 15,313    | 2,850         | 375         | 570               | 3,090                       | 120                                               | 5,660            | 1,920              | 724                      |
| US FISH AND WILDLIFE SERVICE.....           | 10,000    | 10,000        | -           | -                 | -                           | -                                                 | -                | -                  | -                        |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 22,031    | 600           | 1,671       | -                 | -                           | 150                                               | 1,500            | 18,110             | -                        |
| BUREAU OF PRISONS.....                      | 1,331     | -             | -           | -                 | -                           | -                                                 | -                | 1,331              | -                        |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 900       | -             | -           | -                 | -                           | -                                                 | 900              | -                  | -                        |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 100       | -             | -           | -                 | -                           | -                                                 | 100              | -                  | -                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 17,700    | 600           | 1,671       | -                 | -                           | 150                                               | 500              | 14,779             | -                        |
| OFFICE OF THE ATTORNEY GENERAL.....         | 2,000     | -             | -           | -                 | -                           | -                                                 | -                | 2,000              | -                        |
| DEPARTMENT OF LABOR, TOTAL.....             | 22,889    | -             | 264         | -                 | -                           | -                                                 | -                | 22,625             | -                        |
| BUREAU OF LABOR STATISTICS.....             | 860       | -             | -           | -                 | -                           | -                                                 | -                | 860                | -                        |
| EMPLOYMENT AND TRAINING ADMIN.....          | 5,285     | -             | 264         | -                 | -                           | -                                                 | -                | 5,021              | -                        |
| EMPLOYMENT STANDARDS ADMINISTRATION.....    | 5,593     | -             | -           | -                 | -                           | -                                                 | -                | 5,593              | -                        |
| LABOR-MANAGEMENT SERVICES ADMIN.....        | 2,935     | -             | -           | -                 | -                           | -                                                 | -                | 2,935              | -                        |
| OCCUPATIONAL SAFETY & HEALTH ADMIN.....     | 6,546     | -             | -           | -                 | -                           | -                                                 | -                | 6,546              | -                        |
| OFFICE OF THE SECRETARY.....                | 1,670     | -             | -           | -                 | -                           | -                                                 | -                | 1,670              | -                        |
| DEPARTMENT OF STATE, TOTAL.....             | 51,772    | 17,538        | -           | -                 | 11,885                      | -                                                 | -                | 22,349             | -                        |
| DEPARTMENTAL FUNDS.....                     | 2,254     | -             | -           | -                 | 225                         | -                                                 | -                | 2,029              | -                        |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 49,518    | 17,538        | -           | -                 | 11,660                      | -                                                 | -                | 20,320             | -                        |

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TABLE C-54. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | TOTAL   | LIFE<br>SCIENCES | PSY-<br>CHOLOGY | PHYSICAL<br>SCIENCES | ENVIRON-<br>MENTAL<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES | ENGI-<br>NEERING | SOCIAL<br>SCIENCES | OTHER<br>SCIENCES<br>NEC |
|-----------------------------------------|---------|------------------|-----------------|----------------------|--------------------------------|---------------------------------------------------|------------------|--------------------|--------------------------|
| DEPT OF TRANSPORTATION, TOTAL.....      | 60,160  | 2,406            | -               | -                    | 1,226                          | 1,493                                             | 53,574           | 1,461              | -                        |
| FEDERAL AVIATION ADMINISTRATION.....    | 7,400   | -                | -               | -                    | -                              | -                                                 | 7,400            | -                  | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 5,700   | -                | -               | -                    | -                              | -                                                 | 5,700            | -                  | -                        |
| FEDERAL RAILROAD ADMINISTRATION.....    | 6,800   | -                | -               | -                    | -                              | 26                                                | 6,765            | 9                  | -                        |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 31,000  | 2,406            | -               | -                    | -                              | 1,467                                             | 26,867           | 260                | -                        |
| OFFICE OF THE SECRETARY.....            | 2,420   | -                | -               | -                    | -                              | -                                                 | 1,274            | 1,146              | -                        |
| RESEARCH & SPECIAL PROGRAM DIRECTATE    | 2,040   | -                | -               | -                    | 640                            | -                                                 | 1,400            | -                  | -                        |
| US COAST GUARD.....                     | 3,600   | -                | -               | -                    | 586                            | -                                                 | 2,968            | 46                 | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....    | 1,200   | -                | -               | -                    | -                              | -                                                 | 1,200            | -                  | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 2,650   | -                | -               | 1,508                | -                              | -                                                 | 672              | -                  | 470                      |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 550     | -                | -               | 80                   | -                              | -                                                 | -                | -                  | 470                      |
| BUREAU OF ENGRAVING AND PRINTING.....   | 2,100   | -                | -               | 1,428                | -                              | -                                                 | 672              | -                  | -                        |
| OTHER AGENCIES                          |         |                  |                 |                      |                                |                                                   |                  |                    |                          |
| ACTION.....                             | 3,882   | -                | -               | -                    | -                              | -                                                 | -                | 3,882              | -                        |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,664   | -                | -               | -                    | -                              | -                                                 | -                | 1,664              | -                        |
| APPALACHIAN REGIONAL COMMISSION.....    | 600     | -                | -               | -                    | -                              | -                                                 | -                | 600                | -                        |
| CIVIL AERONAUTICS BOARD.....            | 836     | -                | -               | -                    | -                              | -                                                 | -                | 836                | -                        |
| CIVIL SERVICE COMMISSION.....           | 718     | -                | 718             | -                    | -                              | -                                                 | -                | -                  | -                        |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,000   | -                | -               | -                    | -                              | -                                                 | -                | 1,000              | -                        |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 2,050   | 1,201            | -               | -                    | -                              | -                                                 | 508              | 341                | -                        |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 219,240 | 75,173           | -               | 60,667               | 3,600                          | 3,200                                             | 73,000           | 3,600              | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 3,365   | -                | -               | -                    | -                              | 84                                                | 1,485            | 1,796              | -                        |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,316   | -                | -               | -                    | -                              | -                                                 | -                | 1,316              | -                        |
| FEDERAL TRADE COMMISSION.....           | 875     | -                | -               | -                    | -                              | -                                                 | -                | 875                | -                        |
| GENERAL SERVICES ADMINISTRATION.....    | 384     | -                | -               | -                    | -                              | -                                                 | 332              | -                  | 52                       |
| INTERNATIONAL COMMUNICATION AGENCY..... | 100     | -                | -               | -                    | -                              | -                                                 | 100              | -                  | -                        |
| INTERSTATE COMMERCE COMMISSION.....     | 65      | -                | -               | -                    | -                              | 30                                                | -                | 35                 | -                        |
| LIBRARY OF CONGRESS.....                | 270     | -                | -               | -                    | -                              | -                                                 | -                | -                  | 270                      |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 931,961 | 17,134           | 12,189          | 31,108               | 234,739                        | 27,798                                            | 606,826          | 517                | 1,650                    |
| NATIONAL SCIENCE FOUNDATION.....        | 65,950  | 3,855            | -               | 6,455                | 3,741                          | 3,148                                             | 21,785           | 16,839             | 10,127                   |
| NUCLEAR REGULATORY COMMISSION.....      | 155,030 | -                | -               | -                    | -                              | -                                                 | 155,030          | -                  | -                        |
| SMALL BUSINESS ADMINISTRATION.....      | 55      | -                | -               | -                    | -                              | -                                                 | -                | 55                 | -                        |
| TENNESSEE VALLEY AUTHORITY.....         | 41,837  | 1,830            | -               | 2,753                | 1,843                          | -                                                 | 34,614           | -                  | 797                      |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 2,931   | -                | -               | 943                  | 200                            | 230                                               | 104              | 1,454              | -                        |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,666   | -                | -               | -                    | -                              | -                                                 | -                | 2,666              | -                        |
| VETERANS ADMINISTRATION.....            | 90,868  | 77,759           | 9,389           | -                    | -                              | -                                                 | 3,680            | -                  | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-55. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                            |                   |                                       | PHYSICAL SCIENCES |           |           |         |                             |
|---------------------------------------------|------------|----------------------------|-------------------|---------------------------------------|-------------------|-----------|-----------|---------|-----------------------------|
|                                             | TOTAL      | BIO-<br>LOGICAL<br>ASPECTS | SOCIAL<br>ASPECTS | PSYCHO-<br>LOGICAL<br>SCIENCES<br>NEG | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL<br>SCIENCES<br>NEG |
| TOTAL, ALL AGENCIES.....                    | 104,888    | 35,278                     | 58,230            | 11,380                                | 636,748           | 5,840     | 188,230   | 393,363 | 49,315                      |
| DEPARTMENTS                                 |            |                            |                   |                                       |                   |           |           |         |                             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 59         | -                          | 59                | -                                     | 35,976            | -         | 29,855    | 6,121   | -                           |
| FOREST SERVICE.....                         | 59         | -                          | 59                | -                                     | 2,851             | -         | 1,485     | 1,366   | -                           |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                          | -                 | -                                     | 33,125            | -         | 28,370    | 4,755   | -                           |
| COOPERATIVE RESEARCH.....                   | -          | -                          | -                 | -                                     | 3,945             | -         | 3,945     | -       | -                           |
| FEDERAL RESEARCH.....                       | -          | -                          | -                 | -                                     | 29,180            | -         | 24,425    | 4,755   | -                           |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 158        | -                          | 158               | -                                     | 19,608            | 173       | 6,714     | 12,721  | -                           |
| BUREAU OF THE CENSUS.....                   | 151        | -                          | 151               | -                                     | -                 | -         | -         | -       | -                           |
| NATIONAL BUREAU OF STANDARDS.....           | -          | -                          | -                 | -                                     | 19,036            | 173       | 6,142     | 12,721  | -                           |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 7          | -                          | 7                 | -                                     | -                 | -         | -         | -       | -                           |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -          | -                          | -                 | -                                     | 572               | -         | 572       | -       | -                           |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 45,788     | 888                        | 42,580            | 2,320                                 | 217,182           | 3,045     | 65,571    | 113,932 | 34,634                      |
| DEPARTMENT OF THE ARMY.....                 | 17,828     | 135                        | 17,613            | 80                                    | 68,732            | 148       | 52,968    | 15,456  | 160                         |
| DEPARTMENT OF THE NAVY.....                 | 8,121      | -                          | 8,121             | -                                     | 62,147            | 2,249     | 8,064     | 50,974  | 860                         |
| DEPARTMENT OF THE AIR FORCE.....            | 19,353     | 753                        | 14,600            | -                                     | 9,717             | 648       | 3,437     | 5,632   | -                           |
| DEFENSE AGENCIES.....                       | 4,276      | -                          | 2,036             | 2,240                                 | 76,432            | -         | 1,102     | 41,716  | 33,614                      |
| DEPARTMENT-WIDE FUNDS.....                  | 210        | -                          | 210               | -                                     | 154               | -         | -         | 154     | -                           |
| DEPARTMENT OF ENERGY.....                   | -          | -                          | -                 | -                                     | 258,943           | -         | 14,560    | 237,163 | 7,220                       |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 37,975     | 16,194                     | 12,939            | 8,842                                 | 18,741            | -         | 15,635    | 3,106   | -                           |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 28,142     | 16,194                     | 11,948            | -                                     | 40                | -         | 40        | -       | -                           |
| HUMAN DEVELOPMENT SERVICES.....             | 1,454      | -                          | 991               | 463                                   | -                 | -         | -         | -       | -                           |
| NATIONAL INSTITUTES OF HEALTH.....          | 8,379      | -                          | -                 | 8,379                                 | 18,701            | -         | 15,595    | 3,106   | -                           |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 320        | -                          | 320               | -                                     | 4,430             | 27        | 3,803     | 600     | -                           |
| BUREAU OF MINES.....                        | -          | -                          | -                 | -                                     | 1,300             | -         | 1,300     | -       | -                           |
| GEOLOGICAL SURVEY.....                      | -          | -                          | -                 | -                                     | 2,653             | -         | 2,143     | 510     | -                           |
| NATIONAL PARK SERVICE.....                  | -          | -                          | -                 | -                                     | 27                | 27        | -         | -       | -                           |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 320        | -                          | 320               | -                                     | 450               | -         | 360       | 90      | -                           |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 665        | -                          | 665               | -                                     | -                 | -         | -         | -       | -                           |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 665        | -                          | 665               | -                                     | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF LABOR, TOTAL.....             | 233        | -                          | 233               | -                                     | -                 | -         | -         | -       | -                           |
| EMPLOYMENT AND TRAINING ADMIN.....          | 233        | -                          | 233               | -                                     | -                 | -         | -         | -       | -                           |
| DEPT OF TRANSPORTATION, TOTAL.....          | 66         | -                          | 66                | -                                     | -                 | -         | -         | -       | -                           |
| OFFICE OF THE SECRETARY.....                | 66         | -                          | 66                | -                                     | -                 | -         | -         | -       | -                           |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | -          | -                          | -                 | -                                     | 1,236             | -         | 294       | 202     | 740                         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS.....   | -          | -                          | -                 | -                                     | 80                | -         | 40        | 40      | -                           |
| BUREAU OF ENGRAVING AND PRINTING.....       | -          | -                          | -                 | -                                     | 1,156             | -         | 254       | 162     | 740                         |
| OTHER AGENCIES                              |            |                            |                   |                                       |                   |           |           |         |                             |
| CIVIL SERVICE COMMISSION.....               | 691        | -                          | 691               | -                                     | -                 | -         | -         | -       | -                           |
| ENVIRONMENTAL PROTECTION AGENCY.....        | -          | -                          | -                 | -                                     | 48,694            | -         | 44,984    | 3,710   | -                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 10,332     | 9,637                      | 477               | 218                                   | 24,564            | 2,595     | 1,419     | 13,829  | 6,721                       |
| NATIONAL SCIENCE FOUNDATION.....            | -          | -                          | -                 | -                                     | 4,980             | -         | 3,269     | 1,711   | -                           |
| TENNESSEE VALLEY AUTHORITY.....             | -          | -                          | -                 | -                                     | 2,075             | -         | 2,075     | -       | -                           |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -          | -                          | -                 | -                                     | 319               | -         | 51        | 268     | -                           |
| VETERANS ADMINISTRATION.....                | 8,601      | 8,559                      | 42                | -                                     | -                 | -         | -         | -       | -                           |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-56. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                     |                |                             | PHYSICAL SCIENCES |           |           |         |                       |
|---------------------------------------------|------------|---------------------|----------------|-----------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                             | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 114,080    | 38,204              | 63,516         | 12,340                      | 717,854           | 7,946     | 221,523   | 424,441 | 63,944                |
| DEPARTMENTS                                 |            |                     |                |                             |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 70         | -                   | 70             | -                           | 39,161            | -         | 32,432    | 6,729   | -                     |
| FOREST SERVICE.....                         | 70         | -                   | 70             | -                           | 3,379             | -         | 1,760     | 1,619   | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                   | -              | -                           | 35,782            | -         | 30,672    | 5,110   | -                     |
| COOPERATIVE RESEARCH.....                   | -          | -                   | -              | -                           | 4,423             | -         | 4,423     | -       | -                     |
| FEDERAL RESEARCH.....                       | -          | -                   | -              | -                           | 31,359            | -         | 26,249    | 5,110   | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 169        | -                   | 169            | -                           | 21,056            | 190       | 7,265     | 13,601  | -                     |
| BUREAU OF THE CENSUS.....                   | 161        | -                   | 161            | -                           | -                 | -         | -         | -       | -                     |
| NATIONAL BUREAU OF STANDARDS.....           | -          | -                   | -              | -                           | 20,487            | 190       | 6,696     | 13,601  | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 8          | -                   | 8              | -                           | -                 | -         | -         | -       | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -          | -                   | -              | -                           | 569               | -         | 569       | -       | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 47,851     | 1,074               | 45,058         | 1,719                       | 226,480           | 3,058     | 70,216    | 106,067 | 47,139                |
| DEPARTMENT OF THE ARMY.....                 | 19,472     | 300                 | 19,112         | 60                          | 83,261            | -         | 55,317    | 16,260  | 11,684                |
| DEPARTMENT OF THE NAVY.....                 | 8,432      | -                   | 8,432          | -                           | 62,809            | 2,393     | 10,573    | 49,193  | 650                   |
| DEPARTMENT OF THE AIR FORCE.....            | 15,762     | 774                 | 14,988         | -                           | 9,976             | 665       | 3,529     | 5,782   | -                     |
| DEFENSE AGENCIES.....                       | 3,081      | -                   | 1,422          | 1,659                       | 69,606            | -         | 797       | 34,004  | 34,805                |
| DEPARTMENTWIDE FUNDS.....                   | 1,104      | -                   | 1,104          | -                           | 828               | -         | -         | 828     | -                     |
| DEPARTMENT OF ENERGY.....                   | -          | -                   | -              | -                           | 304,354           | -         | 23,849    | 272,795 | 7,710                 |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 41,135     | 17,175              | 14,024         | 9,936                       | 21,098            | -         | 17,599    | 3,499   | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 30,118     | 17,175              | 12,943         | -                           | 43                | -         | 43        | -       | -                     |
| HUMAN DEVELOPMENT SERVICES.....             | 1,586      | -                   | 1,081          | 505                         | -                 | -         | -         | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 9,431      | -                   | -              | 9,431                       | 21,055            | -         | 17,556    | 3,499   | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 350        | -                   | 350            | -                           | 6,113             | 34        | 5,160     | 919     | -                     |
| BUREAU OF MINES.....                        | -          | -                   | -              | -                           | 1,400             | -         | 1,400     | -       | -                     |
| GEOLOGICAL SURVEY.....                      | -          | -                   | -              | -                           | 4,179             | -         | 3,375     | 804     | -                     |
| NATIONAL PARK SERVICE.....                  | -          | -                   | -              | -                           | 34                | 34        | -         | -       | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 350        | -                   | 350            | -                           | 500               | -         | 385       | 115     | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 2,761      | -                   | 2,336          | 425                         | -                 | -         | -         | -       | -                     |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 300        | -                   | -              | 300                         | -                 | -         | -         | -       | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 2,461      | -                   | 2,336          | 125                         | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF LABOR, TOTAL.....             | 253        | -                   | 253            | -                           | -                 | -         | -         | -       | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....          | 253        | -                   | 253            | -                           | -                 | -         | -         | -       | -                     |
| DEPT OF TRANSPORTATION, TOTAL.....          | 87         | -                   | 87             | -                           | -                 | -         | -         | -       | -                     |
| OFFICE OF THE SECRETARY.....                | 87         | -                   | 87             | -                           | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | -          | -                   | -              | -                           | 1,304             | -         | 310       | 211     | 783                   |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS.....   | -          | -                   | -              | -                           | 80                | -         | 40        | 40      | -                     |
| BUREAU OF ENGRAVING AND PRINTING.....       | -          | -                   | -              | -                           | 1,224             | -         | 270       | 171     | 783                   |
| OTHER AGENCIES                              |            |                     |                |                             |                   |           |           |         |                       |
| CIVIL SERVICE COMMISSION.....               | 718        | -                   | 718            | -                           | -                 | -         | -         | -       | -                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | -          | -                   | -              | -                           | 61,884            | -         | 57,354    | 4,530   | -                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 11,176     | 10,511              | 405            | 260                         | 28,187            | 4,664     | 1,514     | 13,697  | 8,312                 |
| NATIONAL SCIENCE FOUNDATION.....            | -          | -                   | -              | -                           | 5,350             | -         | 3,180     | 2,170   | -                     |
| TENNESSEE VALLEY AUTHORITY.....             | -          | -                   | -              | -                           | 2,594             | -         | 2,594     | -       | -                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -          | -                   | -              | -                           | 273               | -         | 50        | 223     | -                     |
| VETERANS ADMINISTRATION.....                | 9,490      | 9,444               | 46             | -                           | -                 | -         | -         | -       | -                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-57. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                     |                |                             | PHYSICAL SCIENCES |           |           |         |                       |
|---------------------------------------------|------------|---------------------|----------------|-----------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                             | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 126,193    | 42,638              | 72,279         | 11,276                      | 750,791           | 8,222     | 233,107   | 427,005 | 82,457                |
| DEPARTMENTS                                 |            |                     |                |                             |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 68         | -                   | 68             | -                           | 38,594            | -         | 31,918    | 6,676   | -                     |
| FOREST SERVICE.....                         | 68         | -                   | 68             | -                           | 3,264             | -         | 1,700     | 1,564   | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                   | -              | -                           | 35,330            | -         | 30,218    | 5,112   | -                     |
| COOPERATIVE RESEARCH.....                   | -          | -                   | -              | -                           | 3,956             | -         | 3,956     | -       | -                     |
| FEDERAL RESEARCH.....                       | -          | -                   | -              | -                           | 31,374            | -         | 26,262    | 5,112   | -                     |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 203        | -                   | 203            | -                           | 20,528            | 198       | 6,817     | 13,513  | -                     |
| BUREAU OF THE CENSUS.....                   | 193        | -                   | 193            | -                           | -                 | -         | -         | -       | -                     |
| NATIONAL BUREAU OF STANDARDS.....           | -          | -                   | -              | -                           | 19,932            | 198       | 6,221     | 13,513  | -                     |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 10         | -                   | 10             | -                           | -                 | -         | -         | -       | -                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | -          | -                   | -              | -                           | 596               | -         | 596       | -       | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 52,551     | 1,284               | 50,135         | 1,132                       | 250,228           | 3,145     | 78,014    | 103,780 | 65,289                |
| DEPARTMENT OF THE ARMY.....                 | 24,540     | 500                 | 24,040         | -                           | 83,144            | -         | 62,418    | 12,300  | 8,426                 |
| DEPARTMENT OF THE NAVY.....                 | 9,514      | -                   | 9,514          | -                           | 62,667            | 2,471     | 11,120    | 48,320  | 756                   |
| DEPARTMENT OF THE AIR FORCE.....            | 15,967     | 784                 | 15,183         | -                           | 10,126            | 674       | 3,575     | 5,877   | -                     |
| DEFENSE AGENCIES.....                       | 1,698      | -                   | 566            | 1,132                       | 93,667            | -         | 901       | 36,659  | 56,107                |
| DEPARTMENTWIDE FUNDS.....                   | 832        | -                   | 832            | -                           | 624               | -         | -         | 624     | -                     |
| DEPARTMENT OF ENERGY.....                   | -          | -                   | -              | -                           | 310,228           | -         | 27,799    | 275,870 | 6,559                 |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 48,765     | 20,470              | 18,411         | 9,884                       | 20,987            | -         | 17,510    | 3,477   | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 37,800     | 20,470              | 17,330         | -                           | 54                | -         | 54        | -       | -                     |
| HUMAN DEVELOPMENT SERVICES.....             | 1,586      | -                   | 1,081          | 505                         | -                 | -         | -         | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 9,379      | -                   | -              | 9,379                       | 20,933            | -         | 17,456    | 3,477   | -                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 375        | -                   | 375            | -                           | 6,792             | 36        | 5,739     | 1,017   | -                     |
| BUREAU OF MINES.....                        | -          | -                   | -              | -                           | 1,600             | -         | 1,600     | -       | -                     |
| GEOLOGICAL SURVEY.....                      | -          | -                   | -              | -                           | 4,586             | -         | 3,704     | 882     | -                     |
| NATIONAL PARK SERVICE.....                  | -          | -                   | -              | -                           | 36                | 36        | -         | -       | -                     |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 375        | -                   | 375            | -                           | 570               | -         | 435       | 135     | -                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 1,671      | -                   | 1,671          | -                           | -                 | -         | -         | -       | -                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 1,671      | -                   | 1,671          | -                           | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF LABOR, TOTAL.....             | 264        | -                   | 264            | -                           | -                 | -         | -         | -       | -                     |
| EMPLOYMENT AND TRAINING ADMIN.....          | 264        | -                   | 264            | -                           | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | -          | -                   | -              | -                           | 1,508             | -         | 354       | 240     | 914                   |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS.....   | -          | -                   | -              | -                           | 80                | -         | 40        | 40      | -                     |
| BUREAU OF ENGRAVING AND PRINTING.....       | -          | -                   | -              | -                           | 1,428             | -         | 314       | 200     | 914                   |
| OTHER AGENCIES                              |            |                     |                |                             |                   |           |           |         |                       |
| CIVIL SERVICE COMMISSION.....               | 718        | -                   | 718            | -                           | -                 | -         | -         | -       | -                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | -          | -                   | -              | -                           | 60,667            | -         | 56,600    | 4,067   | -                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 12,189     | 11,540              | 389            | 260                         | 31,108            | 4,843     | 1,644     | 14,926  | 9,695                 |
| NATIONAL SCIENCE FOUNDATION.....            | -          | -                   | -              | -                           | 6,455             | -         | 3,924     | 2,531   | -                     |
| TENNESSEE VALLEY AUTHORITY.....             | -          | -                   | -              | -                           | 2,753             | -         | 2,753     | -       | -                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -          | -                   | -              | -                           | 943               | -         | 35        | 908     | -                     |
| VETERANS ADMINISTRATION.....                | 9,389      | 9,344               | 45             | -                           | -                 | -         | -         | -       | -                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-58. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |             |                  |                        |                   | ENVIRONMENTAL SCIENCES |              |             |               |                             |
|---------------------------------------------|---------------|-------------|------------------|------------------------|-------------------|------------------------|--------------|-------------|---------------|-----------------------------|
|                                             | TOTAL         | BIO-LOGICAL | CLINICAL MEDICAL | OTHER MEDICAL SCIENCES | LIFE SCIENCES NEC | TOTAL                  | ATMOS-PHERIC | GEO-LOGICAL | OCEAN-OGRAPHY | ENVIRON-MENTAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 1,998,701     | 714,155     | 836,820          | 375,087                | 72,639            | 464,929                | 175,178      | 96,760      | 81,698        | 111,293                     |
| DEPARTMENTS                                 |               |             |                  |                        |                   |                        |              |             |               |                             |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 189,787       | 186,216     | 3,571            | -                      | -                 | 9,720                  | 3,064        | 5,226       | -             | 1,430                       |
| FOREST SERVICE.....                         | 35,461        | 35,461      | -                | -                      | -                 | 7,066                  | 2,197        | 4,869       | -             | -                           |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 154,326       | 150,755     | 3,571            | -                      | -                 | 2,654                  | 867          | 357         | -             | 1,430                       |
| COOPERATIVE RESEARCH.....                   | 54,217        | 50,646      | 3,571            | -                      | -                 | 494                    | 494          | -           | -             | -                           |
| FEDERAL RESEARCH.....                       | 100,109       | 100,109     | -                | -                      | -                 | 2,160                  | 373          | 357         | -             | 1,430                       |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 49,790        | 49,790      | -                | -                      | -                 | 50,795                 | 28,342       | 1,146       | 21,307        | -                           |
| NATIONAL BUREAU OF STANDARDS.....           | -             | -           | -                | -                      | -                 | 106                    | -            | 106         | -             | -                           |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 49,790        | 49,790      | -                | -                      | -                 | 50,689                 | 28,342       | 1,040       | 21,307        | -                           |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 115,404       | 20,257      | 37,367           | 56,229                 | 1,551             | 73,119                 | 39,095       | 16,493      | 16,436        | 1,095                       |
| DEPARTMENT OF THE ARMY.....                 | 69,365        | 15,549      | 37,022           | 16,534                 | 260               | 5,722                  | -            | 5,482       | 117           | 123                         |
| DEPARTMENT OF THE NAVY.....                 | 9,037         | 307         | 255              | 7,999                  | 476               | 18,110                 | 2,890        | -           | 15,220        | -                           |
| DEPARTMENT OF THE AIR FORCE.....            | 31,910        | 255         | -                | 31,655                 | -                 | 25,634                 | 25,089       | 545         | -             | -                           |
| DEFENSE AGENCIES.....                       | 4,904         | 4,048       | -                | 41                     | 815               | 23,653                 | 11,116       | 10,466      | 1,099         | 972                         |
| DEPARTMENTWIDE FUNDS.....                   | 188           | 98          | 901              | -                      | -                 | -                      | -            | -           | -             | -                           |
| DEPARTMENT OF ENERGY.....                   | 89,042        | 55,410      | 2,100            | 6,928                  | 24,604            | 81,225                 | 13,433       | 24,849      | 13,354        | 29,589                      |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 1,351,958     | 285,077     | 746,636          | 276,876                | 43,369            | -                      | -            | -           | -             | -                           |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 42,987        | 25,001      | 6,690            | 1,436                  | 9,860             | -                      | -            | -           | -             | -                           |
| CENTER FOR DISEASE CONTROL.....             | 55,273        | -           | -                | 55,273                 | -                 | -                      | -            | -           | -             | -                           |
| FOOD AND DRUG ADMINISTRATION.....           | 42,872        | 34,115      | -                | 8,757                  | -                 | -                      | -            | -           | -             | -                           |
| HEALTH SERVICES ADMINISTRATION.....         | 7,490         | -           | 2,320            | 4,870                  | 300               | -                      | -            | -           | -             | -                           |
| HUMAN DEVELOPMENT SERVICES.....             | 14,631        | -           | 13,743           | 736                    | 152               | -                      | -            | -           | -             | -                           |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,188,705     | 225,961     | 723,883          | 205,804                | 33,057            | -                      | -            | -           | -             | -                           |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 15,317        | 15,224      | -                | 50                     | 43                | 29,641                 | 6,564        | 20,590      | 158           | 2,329                       |
| BUREAU OF LAND MANAGEMENT.....              | 767           | 767         | -                | -                      | -                 | -                      | -            | -           | -             | -                           |
| BUREAU OF MINES.....                        | -             | -           | -                | -                      | -                 | 2,550                  | -            | 2,250       | -             | 300                         |
| BUREAU OF RECLAMATION.....                  | 500           | 500         | -                | -                      | -                 | 6,523                  | 6,373        | -           | 150           | -                           |
| GEOLOGICAL SURVEY.....                      | -             | -           | -                | -                      | -                 | 17,742                 | -            | 16,769      | -             | 973                         |
| NATIONAL PARK SERVICE.....                  | 3,830         | 3,822       | -                | -                      | 8                 | 502                    | 1            | 297         | -             | 204                         |
| OFFICE OF THE SECRETARY.....                | -             | -           | -                | -                      | -                 | 456                    | -            | 4           | -             | 452                         |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 1,520         | 1,435       | -                | 50                     | 35                | 1,868                  | 190          | 1,270       | 8             | 400                         |
| US FISH AND WILDLIFE SERVICE.....           | 8,700         | 8,700       | -                | -                      | -                 | -                      | -            | -           | -             | -                           |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 172           | -           | -                | 172                    | -                 | -                      | -            | -           | -             | -                           |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 172           | -           | -                | 172                    | -                 | -                      | -            | -           | -             | -                           |
| DEPARTMENT OF STATE, TOTAL.....             | 22,661        | 19,780      | 2,041            | -                      | 840               | 7,161                  | -            | 171         | -             | 6,990                       |
| DEPARTMENTAL FUNDS.....                     | 171           | 171         | -                | -                      | -                 | 171                    | -            | 171         | -             | -                           |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 22,490        | 19,609      | 2,041            | -                      | 840               | 6,990                  | -            | -           | -             | 6,990                       |
| DEPT OF TRANSPORTATION, TOTAL.....          | 2,135         | -           | 2,135            | -                      | -                 | 420                    | 5            | -           | 407           | 8                           |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 2,135         | -           | 2,135            | -                      | -                 | -                      | -            | -           | -             | -                           |
| OFFICE OF THE SECRETARY.....                | -             | -           | -                | -                      | -                 | 13                     | 5            | -           | -             | 8                           |
| US COAST GUARD.....                         | -             | -           | -                | -                      | -                 | 407                    | -            | -           | 407           | -                           |
| OTHER AGENCIES                              |               |             |                  |                        |                   |                        |              |             |               |                             |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 1,423         | -           | -                | -                      | 1,423             | -                      | -            | -           | -             | -                           |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 70,688        | 66,176      | -                | 4,512                  | -                 | 5,444                  | 590          | 3,179       | 1,675         | -                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 12,861        | 1,699       | 982              | 9,451                  | 729               | 201,624                | 80,268       | 23,154      | 28,361        | 69,841                      |
| NATIONAL SCIENCE FOUNDATION.....            | 5,085         | 5,005       | -                | -                      | 80                | 4,733                  | 2,930        | 1,792       | -             | 11                          |
| TENNESSEE VALLEY AUTHORITY.....             | 1,109         | 1,109       | -                | -                      | -                 | 887                    | 887          | -           | -             | -                           |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -             | -           | -                | -                      | -                 | 160                    | -            | 160         | -             | -                           |
| VETERANS ADMINISTRATION.....                | 71,269        | 8,412       | 41,988           | 20,869                 | -                 | -                      | -            | -           | -             | -                           |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-59. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |                 |                     |                              |                         | ENVIRONMENTAL SCIENCES |                  |                 |                   |                                       |
|---------------------------------------------|---------------|-----------------|---------------------|------------------------------|-------------------------|------------------------|------------------|-----------------|-------------------|---------------------------------------|
|                                             | TOTAL         | BIO-<br>LOGICAL | CLINICAL<br>MEDICAL | OTHER<br>MEDICAL<br>SCIENCES | LIFE<br>SCIENCES<br>NEC | TOTAL                  | ATMOS-<br>PHERIC | GEO-<br>LOGICAL | OCEAN-<br>OGRAPHY | ENVIRON-<br>MENTAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 2,215,593     | 780,803         | 933,991             | 421,251                      | 79,548                  | 499,869                | 174,655          | 119,123         | 77,830            | 128,261                               |
| DEPARTMENTS                                 |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 210,344       | 206,341         | 4,003               | -                            | -                       | 11,249                 | 3,557            | 6,156           | -                 | 1,536                                 |
| FOREST SERVICE.....                         | 42,022        | 42,022          | -                   | -                            | -                       | 8,376                  | 2,604            | 5,772           | -                 | -                                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 168,322       | 164,319         | 4,003               | -                            | -                       | 2,873                  | 953              | 384             | -                 | 1,536                                 |
| COOPERATIVE RESEARCH.....                   | 60,738        | 56,735          | 4,003               | -                            | -                       | 552                    | 552              | -               | -                 | -                                     |
| FEDERAL RESEARCH.....                       | 107,584       | 107,584         | -                   | -                            | -                       | 2,321                  | 401              | 384             | -                 | 1,536                                 |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 56,095        | 56,095          | -                   | -                            | -                       | 53,624                 | 29,927           | 1,143           | 22,554            | -                                     |
| NATIONAL BUREAU OF STANDARDS.....           | -             | -               | -                   | -                            | -                       | 116                    | -                | 116             | -                 | -                                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 56,095        | 56,095          | -                   | -                            | -                       | 53,508                 | 29,927           | 1,027           | 22,554            | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 117,661       | 19,009          | 90,413              | 55,667                       | 2,572                   | 74,305                 | 40,209           | 14,923          | 17,359            | 1,814                                 |
| DEPARTMENT OF THE ARMY.....                 | 68,646        | 14,275          | 39,667              | 14,424                       | 280                     | 7,124                  | 1,082            | 5,549           | 273               | 220                                   |
| DEPARTMENT OF THE NAVY.....                 | 9,754         | 209             | 263                 | 8,745                        | 537                     | 17,424                 | 2,809            | -               | 14,615            | -                                     |
| DEPARTMENT OF THE AIR FORCE.....            | 32,760        | 262             | -                   | 32,498                       | -                       | 26,317                 | 25,758           | 559             | -                 | -                                     |
| DEFENSE AGENCIES.....                       | 5,535         | 3,780           | -                   | -                            | 1,755                   | 23,440                 | 10,560           | 8,815           | 2,471             | 1,594                                 |
| DEPARTMENT-WIDE FUNDS.....                  | 966           | 483             | 483                 | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF ENERGY.....                   | 96,601        | 62,178          | -                   | 6,966                        | 27,457                  | 93,460                 | 16,309           | 27,021          | 15,119            | 35,011                                |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 1,515,797     | 318,448         | 638,172             | 311,596                      | 47,581                  | -                      | -                | -               | -                 | -                                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 44,326        | 25,713          | 7,205               | 1,496                        | 9,912                   | -                      | -                | -               | -                 | -                                     |
| CENTER FOR DISEASE CONTROL.....             | 62,664        | -               | -                   | 62,664                       | -                       | -                      | -                | -               | -                 | -                                     |
| FOOD AND DRUG ADMINISTRATION.....           | 48,600        | 38,450          | -                   | 10,150                       | -                       | -                      | -                | -               | -                 | -                                     |
| HEALTH SERVICES ADMINISTRATION.....         | 7,486         | -               | 2,316               | 4,870                        | 300                     | -                      | -                | -               | -                 | -                                     |
| HUMAN DEVELOPMENT SERVICES.....             | 14,983        | -               | 14,014              | 803                          | 166                     | -                      | -                | -               | -                 | -                                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,337,738     | 254,285         | 614,637             | 231,613                      | 37,203                  | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 17,969        | 17,874          | -                   | 60                           | 35                      | 45,408                 | 7,926            | 27,779          | 499               | 9,204                                 |
| BUREAU OF LAND MANAGEMENT.....              | 1,046         | 1,046           | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| BUREAU OF MINES.....                        | -             | -               | -                   | -                            | -                       | 3,400                  | -                | 3,050           | -                 | 350                                   |
| BUREAU OF RECLAMATION.....                  | 404           | 404             | -                   | -                            | -                       | 8,181                  | 7,695            | 17              | 469               | -                                     |
| GEOLOGICAL SURVEY.....                      | -             | -               | -                   | -                            | -                       | 22,396                 | -                | 22,396          | -                 | -                                     |
| NATIONAL PARK SERVICE.....                  | 4,724         | 4,724           | -                   | -                            | -                       | 635                    | 1                | 376             | -                 | 258                                   |
| OFF OF SURF MINING RECLAM & ENFORCE.....    | -             | -               | -                   | -                            | -                       | 7,800                  | -                | -               | -                 | 7,800                                 |
| OFFICE OF THE SECRETARY.....                | -             | -               | -                   | -                            | -                       | 286                    | -                | -               | -                 | 286                                   |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 2,495         | 2,400           | -                   | 60                           | 35                      | 2,710                  | 230              | 1,940           | 30                | 510                                   |
| US FISH AND WILDLIFE SERVICE.....           | 9,300         | 9,300           | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 607           | -               | -                   | 607                          | -                       | -                      | -                | -               | -                 | -                                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 607           | -               | -                   | 607                          | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF STATE, TOTAL.....             | 14,854        | 13,014          | 1,840               | -                            | -                       | 1,972                  | -                | 224             | -                 | 1,748                                 |
| DEPARTMENTAL FUNDS.....                     | 3             | 3               | -                   | -                            | -                       | 224                    | -                | 224             | -                 | -                                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 14,851        | 13,011          | 1,840               | -                            | -                       | 1,748                  | -                | -               | -                 | 1,748                                 |
| DEPT OF TRANSPORTATION, TOTAL.....          | 2,235         | -               | 2,235               | -                            | -                       | 213                    | 7                | -               | 195               | 11                                    |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 2,235         | -               | 2,235               | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| OFFICE OF THE SECRETARY.....                | -             | -               | -                   | -                            | -                       | 18                     | 7                | -               | -                 | 11                                    |
| US COAST GUARD.....                         | -             | -               | -                   | -                            | -                       | 195                    | -                | -               | 195               | -                                     |
| OTHER AGENCIES                              |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 1,033         | -               | -                   | -                            | 1,033                   | -                      | -                | -               | -                 | -                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 81,961        | 73,061          | -                   | 8,900                        | -                       | 5,934                  | 1,400            | 3,034           | 1,500             | -                                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 17,453        | 1,274           | 1,000               | 14,429                       | 750                     | 209,452                | 74,190           | 35,809          | 20,594            | 78,859                                |
| NATIONAL SCIENCE FOUNDATION.....            | 3,082         | 2,962           | -                   | -                            | 120                     | 2,988                  | 214              | 2,696           | -                 | 78                                    |
| TENNESSEE VALLEY AUTHORITY.....             | 1,468         | 1,268           | -                   | -                            | -                       | 916                    | 916              | -               | -                 | -                                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -             | -               | -                   | -                            | -                       | 368                    | -                | 338             | 10                | -                                     |
| VETERANS ADMINISTRATION.....                | 78,633        | 9,279           | 40,328              | 23,026                       | -                       | -                      | -                | -               | -                 | -                                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-60. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |                 |                     |                   |                         | ENVIRONMENTAL SCIENCES |                  |                 |                  |                                       |
|---------------------------------------------|---------------|-----------------|---------------------|-------------------|-------------------------|------------------------|------------------|-----------------|------------------|---------------------------------------|
|                                             | TOTAL         | BIO-<br>LOGICAL | CLINICAL<br>MEDICAL | OTHER<br>SCIENCES | LIFE<br>SCIENCES<br>NEC | TOTAL                  | ATMOS-<br>PHERIC | GEO-<br>LOGICAL | OCEAN-<br>GRAPHY | ENVIRON-<br>MENTAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 2,207,639     | 775,425         | 933,627             | 416,844           | 81,743                  | 542,802                | 191,107          | 130,446         | 85,487           | 135,762                               |
| DEPARTMENTS                                 |               |                 |                     |                   |                         |                        |                  |                 |                  |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 202,584       | 199,004         | 3,580               | -                 | -                       | 10,907                 | 3,411            | 5,959           | -                | 1,537                                 |
| FOREST SERVICE.....                         | 40,587        | 40,587          | -                   | -                 | -                       | 8,090                  | 2,515            | 5,575           | -                | -                                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 161,997       | 158,417         | 3,580               | -                 | -                       | 2,817                  | 896              | 384             | -                | 1,537                                 |
| COOPERATIVE RESEARCH.....                   | 54,359        | 50,779          | 3,580               | -                 | -                       | 495                    | 495              | -               | -                | -                                     |
| FEDERAL RESEARCH.....                       | 107,638       | 107,638         | -                   | -                 | -                       | 2,322                  | 401              | 384             | -                | 1,537                                 |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 60,484        | 60,484          | -                   | -                 | -                       | 62,140                 | 31,661           | 1,519           | 28,960           | -                                     |
| NATIONAL BUREAU OF STANDARDS.....           | -             | -               | -                   | -                 | -                       | 121                    | -                | 121             | -                | -                                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 60,484        | 60,484          | -                   | -                 | -                       | 62,019                 | 31,661           | 1,398           | 28,960           | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 116,870       | 17,634          | 41,241              | 55,634            | 2,361                   | 80,056                 | 40,699           | 15,996          | 19,878           | 3,483                                 |
| DEPARTMENT OF THE ARMY.....                 | 67,697        | 13,212          | 40,592              | 13,793            | 300                     | 8,325                  | 1,576            | 6,047           | 485              | 217                                   |
| DEPARTMENT OF THE NAVY.....                 | 10,093        | 208             | 285                 | 8,920             | 680                     | 10,512                 | 2,166            | -               | 16,346           | -                                     |
| DEPARTMENT OF THE AIR FORCE.....            | 33,186        | 265             | -                   | 32,921            | -                       | 26,659                 | 26,092           | 567             | -                | -                                     |
| DEFENSE AGENCIES.....                       | 4,966         | 3,585           | -                   | -                 | 1,381                   | 26,560                 | 10,865           | 9,382           | 3,047            | 3,266                                 |
| DEPARTMENTWIDE FUNDS.....                   | 728           | 364             | 364                 | -                 | -                       | -                      | -                | -               | -                | -                                     |
| DEPARTMENT OF ENERGY.....                   | 89,100        | 55,637          | -                   | 6,372             | 27,091                  | 92,689                 | 15,531           | 25,632          | 13,988           | 37,538                                |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 1,921,892     | 322,561         | 607,715             | 311,393           | 50,223                  | -                      | -                | -               | -                | -                                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 54,953        | 30,724          | 9,687               | 1,786             | 12,754                  | -                      | -                | -               | -                | -                                     |
| CENTER FOR DISEASE CONTROL.....             | 63,075        | -               | -                   | 63,075            | -                       | -                      | -                | -               | -                | -                                     |
| FOOD AND DRUG ADMINISTRATION.....           | 49,147        | 38,924          | -                   | 10,223            | -                       | -                      | -                | -               | -                | -                                     |
| HEALTH SERVICES ADMINISTRATION.....         | 7,720         | -               | 2,550               | 4,870             | 300                     | -                      | -                | -               | -                | -                                     |
| HUMAN DEVELOPMENT SERVICES.....             | 10,471        | -               | 15,502              | 803               | 166                     | -                      | -                | -               | -                | -                                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,339,526     | 252,913         | 609,976             | 230,634           | 37,003                  | -                      | -                | -               | -                | -                                     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 19,173        | 19,023          | -                   | 90                | 60                      | 39,776                 | 4,751            | 30,782          | 241              | 4,002                                 |
| BUREAU OF LAND MANAGEMENT.....              | 1,025         | 1,025           | -                   | -                 | -                       | -                      | -                | -               | -                | -                                     |
| BUREAU OF MINES.....                        | -             | -               | -                   | -                 | -                       | 3,350                  | -                | 3,000           | -                | 350                                   |
| BUREAU OF RECLAMATION.....                  | 367           | 367             | -                   | -                 | -                       | 4,721                  | 4,500            | -               | 221              | -                                     |
| GEOLOGICAL SURVEY.....                      | -             | -               | -                   | -                 | -                       | 25,246                 | -                | 25,246          | -                | -                                     |
| NATIONAL PARK SERVICE.....                  | 4,931         | 4,931           | -                   | -                 | -                       | 669                    | 1                | 396             | -                | 272                                   |
| OFF OF SURF MINING RECLAM & ENFORCE.....    | -             | -               | -                   | -                 | -                       | 2,700                  | -                | -               | -                | 2,700                                 |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 2,650         | 2,700           | -                   | 90                | 60                      | 3,090                  | 250              | 2,140           | 20               | 680                                   |
| US FISH AND WILDLIFE SERVICE.....           | 10,000        | 10,000          | -                   | -                 | -                       | -                      | -                | -               | -                | -                                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 600           | -               | -                   | 600               | -                       | -                      | -                | -               | -                | -                                     |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 600           | -               | -                   | 600               | -                       | -                      | -                | -               | -                | -                                     |
| DEPARTMENT OF STATE, TOTAL.....             | 17,538        | 15,689          | 1,849               | -                 | -                       | 11,885                 | -                | 225             | -                | 11,660                                |
| DEPARTMENTAL FUNDS.....                     | -             | -               | -                   | -                 | -                       | 225                    | -                | 225             | -                | -                                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 17,538        | 15,689          | 1,849               | -                 | -                       | 11,660                 | -                | -               | -                | 11,660                                |
| DEPT OF TRANSPORTATION, TOTAL.....          | 2,406         | -               | 2,406               | -                 | -                       | 1,226                  | 640              | -               | 586              | -                                     |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 2,406         | -               | 2,406               | -                 | -                       | -                      | -                | -               | -                | -                                     |
| RESEARCH & SPECIAL PROGRAM DIRECTOR.....    | -             | -               | -                   | -                 | -                       | 640                    | 640              | -               | -                | -                                     |
| US COAST GUARD.....                         | -             | -               | -                   | -                 | -                       | 586                    | -                | -               | 586              | -                                     |
| OTHER AGENCIES                              |               |                 |                     |                   |                         |                        |                  |                 |                  |                                       |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 1,201         | -               | -                   | -                 | 1,201                   | -                      | -                | -               | -                | -                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 75,173        | 69,440          | -                   | 5,733             | -                       | 3,600                  | 200              | 1,900           | 1,500            | -                                     |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 17,134        | 1,216           | 1,000               | 14,168            | 750                     | 234,739                | 92,081           | 44,864          | 20,334           | 77,460                                |
| NATIONAL SCIENCE FOUNDATION.....            | 3,855         | 3,726           | -                   | 72                | 57                      | 3,741                  | 290              | 3,369           | -                | 82                                    |
| TENNESSEE VALLEY AUTHORITY.....             | 1,830         | 1,830           | -                   | -                 | -                       | 1,843                  | 1,843            | -               | -                | -                                     |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | -             | -               | -                   | -                 | -                       | 200                    | -                | 200             | -                | -                                     |
| VETERANS ADMINISTRATION.....                | 77,799        | 9,181           | 45,836              | 22,782            | -                       | -                      | -                | -               | -                | -                                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-01. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN ENGINEERING, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |         |                 |                 |                                  |                         |
|---------------------------------------------|-------------|-------------------|--------------------|----------|---------|-----------------|-----------------|----------------------------------|-------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL   | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>REC |
| TOTAL, ALL AGENCIES.....                    | 2,122,833   | 619,930           | 219,901            | 91,117   | 115,245 | 272,971         | 147,436         | 196,202                          | 662,631                 |
| DEPARTMENTS                                 |             |                   |                    |          |         |                 |                 |                                  |                         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 32,478      | -                 | -                  | 3,512    | 4,352   | 259             | 2,347           | -                                | 22,208                  |
| FOREST SERVICE.....                         | 8,314       | -                 | -                  | 453      | 1,960   | 119             | 1,306           | -                                | 4,274                   |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 24,364      | -                 | -                  | 2,859    | 2,392   | 140             | 1,041           | -                                | 17,932                  |
| COOPERATIVE RESEARCH.....                   | 2,709       | -                 | -                  | -        | -       | -               | -               | -                                | 2,709                   |
| FEDERAL RESEARCH.....                       | 21,659      | -                 | -                  | 2,859    | 2,392   | 140             | 1,041           | -                                | 15,227                  |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 21,301      | -                 | -                  | 444      | 5,137   | 3,738           | 1,269           | 1,693                            | 9,020                   |
| MARITIME ADMINISTRATION.....                | 2,337       | -                 | -                  | -        | 1,635   | 234             | 234             | -                                | 234                     |
| NATIONAL BUREAU OF STANDARDS.....           | 15,387      | -                 | -                  | 254      | 2,793   | 2,253           | 194             | 1,693                            | 8,200                   |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 1,682       | -                 | -                  | 190      | 63      | 151             | 841             | -                                | 437                     |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 795         | -                 | -                  | -        | 444     | -               | -               | -                                | 149                     |
| NAT'L TELECOMM & INFO ADMIN.....            | 1,100       | -                 | -                  | -        | -       | 1,100           | -               | -                                | -                       |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,140,915   | 376,500           | 95,287             | 29,672   | 31,132  | 213,502         | 70,107          | 81,015                           | 241,500                 |
| DEPARTMENT OF THE ARMY.....                 | 182,572     | 29,539            | 1,438              | 8,827    | 16,086  | 65,182          | 18,480          | 18,951                           | 24,069                  |
| DEPARTMENT OF THE NAVY.....                 | 141,746     | 12,922            | 3,432              | 10,262   | 3,536   | 38,591          | 25,637          | 8,377                            | 38,987                  |
| DEPARTMENT OF THE AIR FORCE.....            | 606,831     | 322,620           | 78,557             | 8,543    | 7,189   | 46,019          | 16,591          | 44,116                           | 145,196                 |
| DEFENSE AGENCIES.....                       | 149,523     | 13,419            | 13,860             | 2,240    | 4,183   | 63,683          | 9,367           | 9,571                            | 33,200                  |
| DEPARTMENTWIDE FUNDS.....                   | 243         | -                 | -                  | -        | 136     | 27              | 32              | -                                | 48                      |
| DEPARTMENT OF ENERGY.....                   | 59,920      | -                 | -                  | 14,177   | 3,700   | 2,402           | 4,754           | 18,194                           | 16,693                  |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 30,922      | -                 | -                  | -        | -       | -               | 24,433          | -                                | 6,489                   |
| HUMAN DEVELOPMENT SERVICES.....             | 6,489       | -                 | -                  | -        | -       | -               | -               | -                                | 6,489                   |
| NATIONAL INSTITUTES OF HEALTH.....          | 24,433      | -                 | -                  | -        | -       | -               | 24,433          | -                                | -                       |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 3,775       | -                 | -                  | -        | -       | -               | -               | -                                | 3,775                   |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 91,740      | -                 | -                  | 4,283    | 8,407   | 774             | 5,119           | 30,427                           | 730                     |
| BUREAU OF MINES.....                        | 43,122      | -                 | -                  | 6,150    | 2,100   | 600             | 3,900           | 30,372                           | -                       |
| BUREAU OF RECLAMATION.....                  | 1,855       | -                 | -                  | 51       | 1,644   | 70              | 122             | -                                | 12                      |
| GEOLOGICAL SURVEY.....                      | 2,279       | -                 | -                  | -        | 1,930   | 50              | 295             | -                                | -                       |
| OFFICE OF THE SECRETARY.....                | 904         | -                 | -                  | -        | 64      | 38              | 802             | -                                | -                       |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 3,584       | -                 | -                  | 128      | 2,667   | 16              | -               | 55                               | 718                     |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 1,048       | -                 | 51                 | -        | -       | 997             | -               | -                                | -                       |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 900         | -                 | -                  | -        | -       | 900             | -               | -                                | -                       |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 148         | -                 | 51                 | -        | -       | 97              | -               | -                                | -                       |
| DEPT OF TRANSPORTATION, TOTAL.....          | 46,870      | 2,435             | 305                | -        | 34,535  | 1,460           | 6,118           | 320                              | 1,697                   |
| FEDERAL AVIATION ADMINISTRATION.....        | 4,700       | 675               | 305                | -        | 3,070   | 450             | -               | -                                | -                       |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 5,300       | -                 | -                  | -        | 4,915   | -               | -               | 320                              | 65                      |
| FEDERAL RAILROAD ADMINISTRATION.....        | 6,568       | -                 | -                  | -        | 2,460   | 556             | 1,920           | -                                | 1,632                   |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 23,839      | -                 | -                  | -        | 20,103  | -               | 3,736           | -                                | -                       |
| OFFICE OF THE SECRETARY.....                | 3,402       | 1,760             | -                  | -        | 1,642   | -               | -               | -                                | -                       |
| US COAST GUARD.....                         | 2,081       | -                 | -                  | -        | 1,345   | 254             | 482             | -                                | -                       |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,000       | -                 | -                  | -        | 1,000   | -               | -               | -                                | -                       |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 544         | -                 | -                  | -        | -       | -               | -               | 476                              | 68                      |
| BUREAU OF ENGRAVING AND PRINTING.....       | 544         | -                 | -                  | -        | -       | -               | -               | 476                              | 68                      |
| OTHER AGENCIES                              |             |                   |                    |          |         |                 |                 |                                  |                         |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 2,030       | -                 | -                  | -        | -       | -               | -               | -                                | 2,030                   |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 65,715      | -                 | -                  | 25,212   | 24,890  | 7,814           | 7,799           | -                                | -                       |
| FEDERAL COMMUNICATIONS COMMISSION.....      | 1,053       | -                 | -                  | -        | -       | 1,053           | -               | -                                | -                       |
| GENERAL SERVICES ADMINISTRATION.....        | 208         | -                 | -                  | -        | 126     | 6               | -               | -                                | 76                      |
| INTERNATIONAL COMMUNICATION AGENCY.....     | 71          | -                 | -                  | -        | -       | -               | -               | -                                | -                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 517,320     | 238,875           | 123,833            | 10,859   | 1,314   | 38,733          | 22,508          | 60,615                           | 27,613                  |
| NATIONAL SCIENCE FOUNDATION.....            | 15,711      | 120               | -                  | 584      | 1,652   | 649             | 657             | 1,462                            | 10,587                  |
| NUCLEAR REGULATORY COMMISSION.....          | 112,291     | -                 | -                  | -        | -       | -               | -               | -                                | 112,291                 |
| TENNESSEE VALLEY AUTHORITY.....             | 15,269      | -                 | -                  | 174      | -       | 361             | 130             | -                                | 14,604                  |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | 75          | -                 | 25                 | -        | -       | -               | -               | -                                | 50                      |
| VETERANS ADMINISTRATION.....                | 3,377       | -                 | -                  | -        | -       | 1,182           | 2,195           | -                                | -                       |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-42. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN ENGINEERING, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |         |                 |                 |                                  |                  |
|---------------------------------------------|-------------|-------------------|--------------------|----------|---------|-----------------|-----------------|----------------------------------|------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL   | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING |
| TOTAL, ALL AGENCIES.....                    | 2,319,664   | 669,302           | 223,814            | 98,511   | 121,630 | 321,611         | 148,175         | 208,779                          | 527,642          |
| DEPARTMENTS                                 |             |                   |                    |          |         |                 |                 |                                  |                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 36,156      | -                 | -                  | 3,846    | 4,895   | 291             | 2,649           | -                                | 24,455           |
| FOREST SERVICE.....                         | 9,856       | -                 | -                  | 774      | 2,323   | 141             | 1,550           | -                                | 5,068            |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 26,300      | -                 | -                  | 3,072    | 2,572   | 150             | 1,119           | -                                | 19,387           |
| COOPERATIVE RESEARCH.....                   | 3,023       | -                 | -                  | -        | -       | -               | -               | -                                | 3,023            |
| FEDERAL RESEARCH.....                       | 23,277      | -                 | -                  | 3,072    | 2,572   | 150             | 1,119           | -                                | 16,364           |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 21,064      | -                 | -                  | 484      | 5,302   | 3,697           | 1,255           | 1,617                            | 8,709            |
| MARITIME ADMINISTRATION.....                | 2,610       | -                 | -                  | -        | 1,827   | 261             | 261             | -                                | 261              |
| NATIONAL BUREAU OF STANDARDS.....           | 19,237      | -                 | -                  | 279      | 2,827   | 2,473           | 127             | 1,617                            | 7,914            |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 1,775       | -                 | -                  | 205      | 48      | 163             | 667             | -                                | 472              |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 642         | -                 | -                  | -        | 580     | -               | -               | -                                | 82               |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 400         | -                 | -                  | -        | -       | 800             | -               | -                                | -                |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,190,995   | 386,240           | 97,325             | 32,268   | 29,283  | 258,601         | 90,123          | 74,116                           | 223,039          |
| DEPARTMENT OF THE ARMY.....                 | 165,353     | 27,476            | 1,083              | 11,033   | 12,645  | 71,192          | 21,878          | 11,459                           | 8,567            |
| DEPARTMENT OF THE NAVY.....                 | 149,934     | 14,923            | 3,520              | 9,858    | 3,684   | 41,530          | 29,346          | 9,782                            | 37,271           |
| DEPARTMENT OF THE AIR FORCE.....            | 684,615     | 331,224           | 78,599             | 8,771    | 7,381   | 47,246          | 17,034          | 43,293                           | 149,047          |
| DEFENSE AGENCIES.....                       | 189,782     | 12,617            | 14,123             | 7,606    | 4,863   | 98,495          | 21,638          | 7,582                            | 27,634           |
| DEPARTMENT-WIDE FUNDS.....                  | 1,311       | -                 | -                  | -        | 690     | 138             | 207             | -                                | 276              |
| DEPARTMENT OF ENERGY.....                   | 68,939      | -                 | -                  | 14,203   | 2,100   | 1,283           | 655             | 16,062                           | 34,636           |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 34,569      | -                 | -                  | -        | -       | -               | -               | -                                | 34,569           |
| HUMAN DEVELOPMENT SERVICES.....             | 7,074       | -                 | -                  | -        | -       | -               | -               | -                                | 7,074            |
| NATIONAL INSTITUTES OF HEALTH.....          | 27,491      | -                 | -                  | -        | -       | -               | -               | -                                | 27,491           |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 4,796       | -                 | -                  | -        | -       | -               | -               | -                                | 4,796            |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 57,984      | -                 | -                  | 6,470    | 10,216  | 725             | 4,775           | 35,005                           | 793              |
| BUREAU OF MINES.....                        | 48,100      | -                 | -                  | 6,350    | 2,050   | 550             | 4,200           | 34,950                           | -                |
| BUREAU OF RECLAMATION.....                  | 1,965       | -                 | -                  | 5        | 1,587   | 85              | 275             | -                                | 13               |
| GEOLOGICAL SURVEY.....                      | 2,964       | -                 | -                  | -        | 2,569   | 75              | 300             | -                                | -                |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 4,975       | -                 | -                  | 115      | 4,010   | 15              | -               | 55                               | 780              |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 2,747       | -                 | -                  | -        | -       | 2,304           | -               | -                                | 443              |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 2,000       | -                 | -                  | -        | -       | 2,000           | -               | -                                | -                |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 304         | -                 | -                  | -        | -       | 304             | -               | -                                | -                |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 443         | -                 | -                  | -        | -       | -               | -               | -                                | 443              |
| DEPARTMENT OF STATE, TOTAL.....             | 550         | -                 | -                  | -        | -       | -               | 550             | -                                | -                |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 550         | -                 | -                  | -        | -       | -               | 550             | -                                | -                |
| DEPT OF TRANSPORTATION, TOTAL.....          | 52,715      | 3,432             | 500                | -        | 37,916  | 1,886           | 6,548           | 315                              | 2,118            |
| FEDERAL AVIATION ADMINISTRATION.....        | 7,700       | 1,105             | 500                | -        | 5,030   | 1,065           | -               | -                                | -                |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 5,200       | -                 | -                  | -        | 4,820   | -               | -               | 315                              | 65               |
| FEDERAL RAILROAD ADMINISTRATION.....        | 8,262       | -                 | -                  | -        | 3,095   | 699             | 2,415           | -                                | 2,053            |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 24,966      | -                 | -                  | -        | 21,054  | -               | 3,912           | -                                | -                |
| OFFICE OF THE SECRETARY.....                | 4,498       | 2,327             | -                  | -        | 2,171   | -               | -               | -                                | -                |
| US COAST GUARD.....                         | 989         | -                 | -                  | -        | 446     | 122             | 221             | -                                | -                |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,100       | -                 | -                  | -        | 1,100   | -               | -               | -                                | -                |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 576         | -                 | -                  | -        | -       | -               | -               | 504                              | 72               |
| BUREAU OF ENGRAVING AND PRINTING.....       | 576         | -                 | -                  | -        | -       | -               | -               | 504                              | 72               |
| OTHER AGENCIES                              |             |                   |                    |          |         |                 |                 |                                  |                  |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 437         | -                 | -                  | -        | -       | -               | -               | -                                | 437              |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 73,005      | -                 | -                  | 29,200   | 28,705  | 7,300           | 7,800           | -                                | -                |
| FEDERAL COMMUNICATIONS COMMISSION.....      | 1,363       | -                 | -                  | -        | -       | 1,363           | -               | -                                | -                |
| GENERAL SERVICES ADMINISTRATION.....        | 257         | -                 | -                  | -        | 102     | 105             | -               | -                                | 50               |
| INTERNATIONAL COMMUNICATION AGENCY.....     | 141         | -                 | -                  | -        | -       | 141             | -               | -                                | -                |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 596,317     | 279,507           | 125,989            | 10,773   | 1,545   | 39,811          | 30,551          | 79,629                           | 28,712           |
| NATIONAL SCIENCE FOUNDATION.....            | 18,464      | 123               | -                  | 958      | 1,516   | 702             | 712             | 1,531                            | 12,922           |
| NUCLEAR REGULATORY COMMISSION.....          | 132,139     | -                 | -                  | -        | -       | -               | -               | -                                | 132,139          |
| TENNESSEE VALLEY AUTHORITY.....             | 22,272      | -                 | -                  | 309      | -       | 1,990           | 319             | -                                | 19,654           |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | 258         | -                 | -                  | -        | 50      | 110             | -               | -                                | 58               |
| VETERANS ADMINISTRATION.....                | 3,720       | -                 | -                  | -        | -       | 1,302           | 2,418           | -                                | -                |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-63. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN ENGINEERING, BY AGENCY  
AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |         |                 |                 |                                  |                          |
|---------------------------------------------|-------------|-------------------|--------------------|----------|---------|-----------------|-----------------|----------------------------------|--------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL   | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>GEN. |
| TOTAL, ALL AGENCIES.....                    | 2,416,943   | 710,106           | 233,315            | 88,399   | 123,975 | 360,909         | 151,312         | 176,759                          | 572,168                  |
| DEPARTMENTS                                 |             |                   |                    |          |         |                 |                 |                                  |                          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 35,518      | -                 | -                  | 3,822    | 4,817   | 286             | 2,615           | -                                | 23,978                   |
| FOREST SERVICE.....                         | 9,518       | -                 | -                  | 748      | 2,244   | 136             | 1,496           | -                                | 4,894                    |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 26,000      | -                 | -                  | 3,074    | 2,573   | 150             | 1,119           | -                                | 19,084                   |
| COOPERATIVE RESEARCH.....                   | 2,712       | -                 | -                  | -        | -       | -               | -               | -                                | 2,712                    |
| FEDERAL RESEARCH.....                       | 23,288      | -                 | -                  | 3,074    | 2,573   | 150             | 1,119           | -                                | 16,372                   |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 22,137      | -                 | -                  | 555      | 5,188   | 4,103           | 1,303           | 1,950                            | 3,438                    |
| MARITIME ADMINISTRATION.....                | 2,250       | -                 | -                  | -        | 1,575   | 225             | 225             | -                                | 225                      |
| NATIONAL BUREAU OF STANDARDS.....           | 16,085      | -                 | -                  | 303      | 2,692   | 2,575           | 132             | 1,550                            | 8,633                    |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 2,062       | -                 | -                  | 252      | 84      | 200             | 946             | -                                | 588                      |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 740         | -                 | -                  | -        | 637     | 103             | -               | -                                | -                        |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 1,000       | -                 | -                  | -        | -       | 1,000           | -               | -                                | -                        |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 1,229,295   | 403,244           | 93,635             | 28,396   | 30,824  | 267,871         | 83,756          | 72,979                           | 228,590                  |
| DEPARTMENT OF THE ARMY.....                 | 188,078     | 30,421            | 780                | 8,506    | 12,913  | 90,794          | 20,745          | 10,547                           | 13,372                   |
| DEPARTMENT OF THE NAVY.....                 | 164,361     | 16,094            | 2,954              | 10,722   | 3,953   | 46,919          | 31,282          | 10,044                           | 42,393                   |
| DEPARTMENT OF THE AIR FORCE.....            | 693,485     | 335,515           | 79,617             | 8,885    | 7,477   | 47,858          | 17,255          | 45,880                           | 150,998                  |
| DEFENSE AGENCIES.....                       | 182,383     | 21,214            | 10,284             | 283      | 3,961   | 102,196         | 14,318          | 6,508                            | 21,619                   |
| DEPARTMENT-WIDE FUNDS.....                  | 988         | -                 | -                  | -        | 520     | 104             | 156             | -                                | 208                      |
| DEPARTMENT OF ENERGY.....                   | 84,912      | -                 | -                  | 8,221    | 2,473   | 6,353           | 12,083          | 17,836                           | 39,346                   |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 34,426      | -                 | -                  | -        | -       | -               | -               | -                                | 34,426                   |
| HUMAN DEVELOPMENT SERVICES.....             | 7,078       | -                 | -                  | -        | -       | -               | -               | -                                | 7,078                    |
| NATIONAL INSTITUTES OF HEALTH.....          | 27,348      | -                 | -                  | -        | -       | -               | -               | -                                | 27,348                   |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 3,905       | -                 | -                  | -        | -       | -               | -               | -                                | 3,905                    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 53,540      | -                 | -                  | 6,475    | 7,742   | 455             | 2,525           | 35,440                           | 903                      |
| BUREAU OF MINES.....                        | 43,900      | -                 | -                  | 6,300    | 350     | -               | 1,900           | 35,350                           | -                        |
| BUREAU OF RECLAMATION.....                  | 898         | -                 | -                  | -        | 305     | 305             | 275             | -                                | 13                       |
| GEOLOGICAL SURVEY.....                      | 3,082       | -                 | -                  | -        | 2,607   | 125             | 350             | -                                | -                        |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 5,660       | -                 | -                  | 175      | 4,480   | 25              | -               | 90                               | 890                      |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 1,500       | -                 | -                  | -        | -       | 1,000           | -               | -                                | 500                      |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 900         | -                 | -                  | -        | -       | 900             | -               | -                                | -                        |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 100         | -                 | -                  | -        | -       | 100             | -               | -                                | -                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 500         | -                 | -                  | -        | -       | -               | -               | -                                | 500                      |
| DEPT OF TRANSPORTATION, TOTAL.....          | 53,574      | 1,060             | 480                | -        | 40,546  | 1,964           | 7,429           | 345                              | 1,750                    |
| FEDERAL AVIATION ADMINISTRATION.....        | 7,400       | 1,060             | 480                | -        | 4,835   | 1,025           | -               | -                                | -                        |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 5,700       | -                 | -                  | -        | 5,285   | -               | -               | 345                              | 70                       |
| FEDERAL RAILROAD ADMINISTRATION.....        | 4,765       | -                 | -                  | -        | 2,534   | 573             | 1,978           | -                                | 1,680                    |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 26,867      | -                 | -                  | -        | 22,656  | -               | 4,211           | -                                | -                        |
| OFFICE OF THE SECRETARY.....                | 1,274       | -                 | -                  | -        | 1,274   | -               | -               | -                                | -                        |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE..... | 1,400       | -                 | -                  | -        | 825     | -               | 575             | -                                | -                        |
| US COAST GUARD.....                         | 2,988       | -                 | -                  | -        | 1,937   | 366             | 665             | -                                | -                        |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,200       | -                 | -                  | -        | 1,200   | -               | -               | -                                | -                        |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 672         | -                 | -                  | -        | -       | -               | -               | 588                              | 84                       |
| BUREAU OF ENGRAVING AND PRINTING.....       | 672         | -                 | -                  | -        | -       | -               | -               | 588                              | 84                       |
| OTHER AGENCIES                              |             |                   |                    |          |         |                 |                 |                                  |                          |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 508         | -                 | -                  | -        | -       | -               | -               | -                                | 508                      |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 73,000      | -                 | -                  | 29,200   | 28,700  | 7,300           | 7,800           | -                                | -                        |
| FEDERAL COMMUNICATIONS COMMISSION.....      | 1,485       | -                 | -                  | -        | -       | 1,485           | -               | -                                | -                        |
| GENERAL SERVICES ADMINISTRATION.....        | 332         | -                 | -                  | -        | 182     | 100             | -               | -                                | 50                       |
| INTERNATIONAL COMMUNICATION AGENCY.....     | 100         | -                 | -                  | -        | -       | 100             | -               | -                                | -                        |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 606,826     | 305,678           | 139,200            | 10,950   | 1,324   | 41,719          | 30,260          | 46,130                           | 31,565                   |
| NATIONAL SCIENCE FOUNDATION.....            | 21,785      | 124               | -                  | 667      | 2,179   | 769             | 793             | 1,891                            | 15,342                   |
| NUCLEAR REGULATORY COMMISSION.....          | 155,030     | -                 | -                  | -        | -       | -               | -               | -                                | 155,030                  |
| TENNESSEE VALLEY AUTHORITY.....             | 34,614      | -                 | -                  | 1,458    | -       | 6,072           | 356             | -                                | 26,728                   |
| US ARMS CONTROL & DISARMAMENT AGENCY.....   | 104         | -                 | -                  | 35       | -       | 44              | -               | -                                | 25                       |
| VETERANS ADMINISTRATION.....                | 3,680       | -                 | -                  | -        | -       | 1,288           | 2,392           | -                                | -                        |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-64. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>SEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>SEC |
| TOTAL, ALL AGENCIES.....                | 96,994                            | 46,822           | 47,803               | 4,369                                                    | 348,826         | 4,339             | 114,323        | 5,935                     | 36,321         | 187,908                   |
| DEPARTMENTS                             |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....   | 2,928                             | 2,928            | -                    | -                                                        | 48,422          | -                 | 45,403         | -                         | 2,293          | 526                       |
| ECON. STAT & COOPERATIVES SERVICE....   | 1,438                             | 1,438            | -                    | -                                                        | 24,459          | -                 | 23,300         | -                         | 695            | 484                       |
| FOREST SERVICE.....                     | 713                               | 713              | -                    | -                                                        | 4,928           | -                 | 4,275          | -                         | 653            | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION    | 777                               | 777              | -                    | -                                                        | 19,035          | -                 | 18,028         | -                         | 945            | 62                        |
| COOPERATIVE RESEARCH.....               | -                                 | -                | -                    | -                                                        | 17,543          | -                 | 15,614         | -                         | 929            | -                         |
| FEDERAL RESEARCH.....                   | 777                               | 777              | -                    | -                                                        | 1,492           | -                 | 1,414          | -                         | 16             | 62                        |
| DEPARTMENT OF COMMERCE, TOTAL.....      | 4,748                             | 1,839            | 2,909                | -                                                        | 5,826           | -                 | 5,610          | -                         | 216            | -                         |
| BUREAU OF THE CENSUS.....               | 1,138                             | 950              | 188                  | -                                                        | 475             | -                 | 259            | -                         | 216            | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..   | -                                 | -                | -                    | -                                                        | 1,500           | -                 | 1,500          | -                         | -              | -                         |
| MARITIME ADMINISTRATION.....            | -                                 | -                | -                    | -                                                        | 163             | -                 | 163            | -                         | -              | -                         |
| NATION. BUREAU OF STANDARDS.....        | 3,507                             | 786              | 2,721                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL FIRE PREV & CONTROL ADMIN....  | 103                               | 103              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....   | -                                 | -                | -                    | -                                                        | 3,073           | -                 | 3,073          | -                         | -              | -                         |
| NAT'L TELECOMM & INFO ADMIN.....        | -                                 | -                | -                    | -                                                        | 100             | -                 | 100            | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP....  | -                                 | -                | -                    | -                                                        | 515             | -                 | 515            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....       | 51,059                            | 10,689           | 36,819               | 3,551                                                    | 24,185          | -                 | 237            | 1,404                     | 532            | 22,012                    |
| DEPARTMENT OF THE ARMY.....             | 5,751                             | 4,673            | 1,078                | -                                                        | 22,647          | -                 | 118            | -                         | 517            | 22,012                    |
| DEPARTMENT OF THE NAVY.....             | 23,478                            | 4,029            | 18,893               | 556                                                      | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF THE AIR FORCE.....        | 555                               | 255              | 300                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                   | 21,118                            | 1,629            | 16,494               | 2,995                                                    | 1,263           | -                 | 411            | 1,222                     | -              | -                         |
| DEPARTMENT-WIDE FUNDS.....              | 157                               | 103              | 54                   | -                                                        | 275             | -                 | 78             | 182                       | 15             | -                         |
| DEPARTMENT OF ENERGY.....               | -                                 | -                | -                    | -                                                        | 2,686           | -                 | 1,551          | -                         | 135            | 1,000                     |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL  | 4,968                             | 4,485            | 483                  | -                                                        | 161,446         | 1,733             | 12,370         | 175                       | 17,992         | 129,176                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..   | 1,363                             | 1,063            | 300                  | -                                                        | 14,386          | 1,733             | 153            | 157                       | 10,557         | 1,786                     |
| HEALTH CARE FINANCING ADMINISTRATION..  | -                                 | -                | -                    | -                                                        | 29,998          | -                 | -              | -                         | -              | 29,998                    |
| HEALTH RESOURCES ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 7,410           | -                 | -              | -                         | -              | 7,410                     |
| HUMAN DEVELOPMENT SERVICES.....         | 183                               | -                | 183                  | -                                                        | 23,776          | -                 | 159            | -                         | 1,700          | 21,917                    |
| NATIONAL INSTITUTE OF EDUCATION.....    | -                                 | -                | -                    | -                                                        | 15,240          | -                 | -              | -                         | -              | 15,240                    |
| NATIONAL INSTITUTES OF HEALTH.....      | 3,422                             | 3,422            | -                    | -                                                        | 6,217           | -                 | -              | -                         | -              | 6,217                     |
| OFFICE OF EDUCATION.....                | -                                 | -                | -                    | -                                                        | 11,892          | -                 | -              | -                         | -              | 11,892                    |
| OFFICE OF ASS'T SECTY FOR EDUCATION.... | -                                 | -                | -                    | -                                                        | 1,037           | -                 | -              | -                         | -              | 1,037                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....   | -                                 | -                | -                    | -                                                        | 24,227          | -                 | 826            | 18                        | 921            | 22,462                    |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                        | 16,046          | -                 | 11,232         | -                         | 4,814          | -                         |
| SOCIAL SECURITY ADMINISTRATION.....     | -                                 | -                | -                    | -                                                        | 11,217          | -                 | -              | -                         | -              | 11,217                    |
| DEPT OF HOUSING & URBAN DEVELOPMENT.... | -                                 | -                | -                    | -                                                        | 28,945          | -                 | 14,890         | -                         | -              | 14,055                    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....  | 1,956                             | 1,327            | 533                  | 96                                                       | 4,598           | 2,606             | 788            | 480                       | 625            | 299                       |
| BUREAU OF LAND MANAGEMENT.....          | -                                 | -                | -                    | -                                                        | 52              | 10                | -              | -                         | 42             | -                         |
| BUREAU OF MINES.....                    | 1,250                             | 1,250            | -                    | -                                                        | 100             | -                 | 100            | -                         | -              | -                         |
| BUREAU OF RECLAMATION.....              | -                                 | -                | -                    | -                                                        | 284             | -                 | 194            | -                         | 90             | -                         |
| GEOLOGICAL SURVEY.....                  | 610                               | 77               | 533                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| HERITAGE CONSERVATION & REC SERVICE..   | -                                 | -                | -                    | -                                                        | 20              | -                 | -              | -                         | -              | 20                        |
| NATIONAL PARK SERVICE.....              | -                                 | -                | -                    | -                                                        | 2,897           | 2,586             | 14             | -                         | 133            | 164                       |
| OFFICE OF WATER RES AND TECHNOLOGY....  | 96                                | -                | -                    | 96                                                       | 1,245           | 10                | 480            | 480                       | 160            | 115                       |
| DEPARTMENT OF JUSTICE, TOTAL.....       | -                                 | -                | -                    | -                                                        | 10,599          | -                 | 257            | -                         | 8,684          | 1,658                     |
| BUREAU OF PRISONS.....                  | -                                 | -                | -                    | -                                                        | 136             | -                 | 7              | -                         | 47             | 82                        |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....   | -                                 | -                | -                    | -                                                        | 10,463          | -                 | 250            | -                         | 8,637          | 1,576                     |
| DEPARTMENT OF LABOR, TOTAL.....         | -                                 | -                | -                    | -                                                        | 17,791          | -                 | 17,207         | -                         | 564            | -                         |
| BUREAU OF LABOR STATISTICS.....         | -                                 | -                | -                    | -                                                        | 896             | -                 | 896            | -                         | -              | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....      | -                                 | -                | -                    | -                                                        | 5,602           | -                 | 5,018          | -                         | 584            | -                         |
| EMPLOYMENT STANDARDS ADMINISTRATION..   | -                                 | -                | -                    | -                                                        | 4,446           | -                 | 4,446          | -                         | -              | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN.....    | -                                 | -                | -                    | -                                                        | 3,161           | -                 | 3,161          | -                         | -              | -                         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN....  | -                                 | -                | -                    | -                                                        | 3,441           | -                 | 3,441          | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                        | 245             | -                 | 245            | -                         | -              | -                         |
| DEPARTMENT OF STATE, TOTAL.....         | -                                 | -                | -                    | -                                                        | 8,448           | -                 | 2,226          | 1,723                     | 3,281          | 1,218                     |
| DEPARTMENTAL FUNDS.....                 | -                                 | -                | -                    | -                                                        | 1,723           | -                 | -              | 1,723                     | -              | -                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT    | -                                 | -                | -                    | -                                                        | 6,725           | -                 | 2,226          | -                         | 3,281          | 1,218                     |

CONTINUED ON NEXT PAGE

TABLE C-84. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEG | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEG |
| DEPT OF TRANSPORTATION, TOTAL.....     | 1,327                             | 260              | 405                  | 662                                                      | 942             | -                 | 840            | 102                       | -              | -                         |
| FEDERAL RAILROAD ADMINISTRATION.....   | 25                                | -                | 25                   | -                                                        | 7               | -                 | 7              | -                         | -              | -                         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..   | 1,302                             | 260              | 380                  | 662                                                      | 224             | -                 | 224            | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 679             | -                 | 577            | 102                       | -              | -                         |
| US COAST GUARD.....                    | -                                 | -                | -                    | -                                                        | 32              | -                 | 32             | -                         | -              | -                         |
| OTHER AGENCIES                         |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| ACTION.....                            | -                                 | -                | -                    | -                                                        | 49              | -                 | -              | -                         | 49             | -                         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS | -                                 | -                | -                    | -                                                        | 1,526           | -                 | 763            | 763                       | -              | -                         |
| APPALACHIAN REGIONAL COMMISSION.....   | -                                 | -                | -                    | -                                                        | 562             | -                 | 562            | -                         | -              | -                         |
| CIVIL AERONAUTICS BOARD.....           | -                                 | -                | -                    | -                                                        | 535             | -                 | 535            | -                         | -              | -                         |
| COMMUNITY SERVICES ADMINISTRATION..... | -                                 | -                | -                    | -                                                        | 1,000           | -                 | -              | -                         | 1,000          | -                         |
| CONSUMER PRODUCT SAFETY COMMISSION.... | -                                 | -                | -                    | -                                                        | 257             | -                 | -              | -                         | -              | 257                       |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 3,100                             | 2,370            | 730                  | -                                                        | 3,315           | -                 | 2,395          | -                         | 920            | -                         |
| FEDERAL COMMUNICATIONS COMMISSION..... | 60                                | -                | -                    | 60                                                       | 930             | -                 | 930            | -                         | -              | -                         |
| FEDERAL HOME LOAN BANK BOARD.....      | -                                 | -                | -                    | -                                                        | 1,665           | -                 | 1,665          | -                         | -              | -                         |
| FEDERAL TRADE COMMISSION.....          | -                                 | -                | -                    | -                                                        | 750             | -                 | 750            | -                         | -              | -                         |
| GENERAL SERVICES ADMINISTRATION.....   | -                                 | -                | -                    | -                                                        | 50              | -                 | 50             | -                         | -              | -                         |
| INTERSTATE COMMERCE COMMISSION.....    | 42                                | 42               | -                    | -                                                        | 22              | -                 | 22             | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 23,423                            | 20,557           | 2,866                | -                                                        | 533             | -                 | 457            | 30                        | -              | 46                        |
| NATIONAL SCIENCE FOUNDATION.....       | 3,279                             | 249              | 3,030                | -                                                        | 19,491          | -                 | 1,500          | 120                       | 210            | 17,661                    |
| SMALL BUSINESS ADMINISTRATION.....     | -                                 | -                | -                    | -                                                        | 466             | -                 | 466            | -                         | -              | -                         |
| US ARMS CONTROL & DISARMAMENT AGENCY.. | 104                               | 76               | 28                   | -                                                        | 1,138           | -                 | -              | 1,138                     | -              | -                         |
| US INTERNATIONAL TRADE COMMISSION..... | -                                 | -                | -                    | -                                                        | 2,649           | -                 | 2,649          | -                         | -              | -                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-65. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 109,127                           | 48,298           | 53,879               | 6,950                                                    | 412,879         | 6,561             | 137,236        | 7,935                     | 57,360         | 203,787                   |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 3,187                             | 3,187            | -                    | -                                                        | 55,326          | -                 | 52,126         | -                         | 2,612          | 588                       |
| ECON. STAT & COOPERATIVES SERVICE....  | 1,507                             | 1,507            | -                    | -                                                        | 28,159          | -                 | 26,858         | -                         | 780            | 521                       |
| FOREST SERVICE.....                    | 845                               | 845              | -                    | -                                                        | 5,842           | -                 | 5,068          | -                         | 774            | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 835                               | 835              | -                    | -                                                        | 21,325          | -                 | 20,200         | -                         | 1,058          | 67                        |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 19,722          | -                 | 18,680         | -                         | 1,042          | -                         |
| FEDERAL RESEARCH.....                  | 835                               | 835              | -                    | -                                                        | 1,603           | -                 | 1,520          | -                         | 16             | 67                        |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 5,181                             | 1,993            | 3,188                | -                                                        | 8,396           | -                 | 8,178          | -                         | 218            | -                         |
| BUREAU OF THE CENSUS.....              | 1,220                             | 1,019            | 201                  | -                                                        | 479             | -                 | 261            | -                         | 218            | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | -                                 | -                | -                    | -                                                        | 3,000           | -                 | 3,000          | -                         | -              | -                         |
| MARITIME ADMINISTRATION.....           | -                                 | -                | -                    | -                                                        | 290             | -                 | 290            | -                         | -              | -                         |
| NATIONAL BUREAU OF STANDARDS.....      | 3,850                             | 863              | 2,987                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 111                               | 111              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL OCEANIC AND ATMOS ADMIN..     | -                                 | -                | -                    | -                                                        | 3,927           | -                 | 3,927          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP..   | -                                 | -                | -                    | -                                                        | 700             | -                 | 700            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 58,571                            | 10,441           | 42,181               | 5,949                                                    | 23,438          | -                 | 1,082          | 2,388                     | 655            | 19,313                    |
| DEPARTMENT OF THE ARMY.....            | 10,458                            | 2,885            | 7,573                | -                                                        | 20,567          | -                 | 668            | -                         | 584            | 19,313                    |
| DEPARTMENT OF THE NAVY.....            | 23,840                            | 4,609            | 18,623               | 608                                                      | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 570                               | 262              | 308                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 22,875                            | 2,133            | 19,401               | 5,341                                                    | 1,422           | -                 | -              | 1,422                     | -              | -                         |
| DEPARTMENTWIDE FUNDS.....              | 828                               | 552              | 276                  | -                                                        | 1,449           | -                 | 414            | 966                       | 69             | -                         |
| DEPARTMENT OF ENERGY.....              | 549                               | -                | 549                  | -                                                        | 2,575           | -                 | 985            | -                         | 1,090          | 500                       |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 5,397                             | 5,197            | 200                  | -                                                        | 186,223         | 2,607             | 18,661         | 431                       | 21,269         | 143,255                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 1,342                             | 1,342            | -                    | -                                                        | 15,373          | 2,607             | 168            | 165                       | 10,956         | 1,477                     |
| HEALTH CARE FINANCING ADMINISTRATION.. | -                                 | -                | -                    | -                                                        | 35,065          | -                 | -              | -                         | -              | 35,065                    |
| HEALTH RESOURCES ADMINISTRATION.....   | -                                 | -                | -                    | -                                                        | 5,000           | -                 | -              | -                         | -              | 5,000                     |
| HUMAN DEVELOPMENT SERVICES.....        | 200                               | -                | 200                  | -                                                        | 23,622          | -                 | 173            | -                         | 1,854          | 21,595                    |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 19,200          | -                 | -              | -                         | -              | 19,200                    |
| NATIONAL INSTITUTES OF HEALTH.....     | 3,855                             | 3,855            | -                    | -                                                        | 6,999           | -                 | -              | -                         | -              | 6,999                     |
| OFFICE OF EDUCATION.....               | -                                 | -                | -                    | -                                                        | 14,255          | -                 | -              | -                         | -              | 14,255                    |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | -                                 | -                | -                    | -                                                        | 1,042           | -                 | -              | -                         | -              | 1,042                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | -                                 | -                | -                    | -                                                        | 27,965          | -                 | 1,065          | 266                       | 1,064          | 25,570                    |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 24,650          | -                 | 17,255         | -                         | 7,395          | -                         |
| SOCIAL SECURITY ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 13,052          | -                 | -              | -                         | -              | 13,052                    |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | -                                 | -                | -                    | -                                                        | 33,304          | -                 | 15,858         | -                         | -              | 17,446                    |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 2,914                             | 1,871            | 933                  | 110                                                      | 5,755           | 3,404             | 854            | 610                       | 500            | 387                       |
| BUREAU OF LAND MANAGEMENT.....         | -                                 | -                | -                    | -                                                        | 32              | -                 | -              | -                         | 32             | -                         |
| BUREAU OF MINES.....                   | 1,750                             | 1,750            | -                    | -                                                        | 115             | -                 | 115            | -                         | -              | -                         |
| BUREAU OF RECLAMATION.....             | -                                 | -                | -                    | -                                                        | 221             | -                 | 152            | -                         | 69             | -                         |
| GEOLOGICAL SURVEY.....                 | 1,054                             | 121              | 933                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL PARK SERVICE.....             | -                                 | -                | -                    | -                                                        | 3,787           | 3,394             | 171            | -                         | 169            | 207                       |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 110                               | -                | -                    | 110                                                      | 1,600           | 101               | 570            | 610                       | 230            | 180                       |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 75                                | 75               | -                    | -                                                        | 27,560          | -                 | 332            | -                         | 19,743         | 7,485                     |
| BUREAU OF PRISONS.....                 | -                                 | -                | -                    | -                                                        | 746             | -                 | 82             | -                         | 149            | 516                       |
| LAW ENFORCEMENT ASSISTANCE ADMIN..     | 75                                | 75               | -                    | -                                                        | 24,814          | -                 | 250            | -                         | 19,595         | 4,969                     |
| OFFICE OF THE ATTORNEY GENERAL.....    | -                                 | -                | -                    | -                                                        | 2,000           | -                 | -              | -                         | -              | 2,000                     |
| DEPARTMENT OF LABOR, TOTAL.....        | -                                 | -                | -                    | -                                                        | 18,788          | -                 | 18,282         | -                         | 506            | -                         |
| BUREAU OF LABOR STATISTICS.....        | -                                 | -                | -                    | -                                                        | 742             | -                 | 742            | -                         | -              | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....     | -                                 | -                | -                    | -                                                        | 4,809           | -                 | 4,303          | -                         | 506            | -                         |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | -                                 | -                | -                    | -                                                        | 5,583           | -                 | 5,583          | -                         | -              | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | -                                 | -                | -                    | -                                                        | 2,910           | -                 | 2,910          | -                         | -              | -                         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | -                                 | -                | -                    | -                                                        | 4,499           | -                 | 4,499          | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 245             | -                 | 245            | -                         | -              | -                         |
| DEPARTMENT OF STATE, TOTAL.....        | -                                 | -                | -                    | -                                                        | 18,459          | 550               | 6,528          | 2,200                     | 8,331          | 850                       |
| DEPARTMENTAL FUNDS.....                | -                                 | -                | -                    | -                                                        | 2,200           | -                 | -              | 2,200                     | -              | -                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | -                                 | -                | -                    | -                                                        | 16,259          | 550               | 6,528          | -                         | 8,331          | 850                       |

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TABLE C-45. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                       | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|-------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| DEPT OF TRANSPORTATION, TOTAL.....      | 1,394                             | 272              | 429                  | 693                                                   | 1,156           | -                 | 1,021          | 135                       | -              | -                         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 31                                | -                | 31                   | -                                                     | 7               | -                 | 7              | -                         | -              | -                         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 1,363                             | 272              | 398                  | 693                                                   | 234             | -                 | 234            | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                     | 897             | -                 | 762            | 135                       | -              | -                         |
| US COAST GUARD.....                     | -                                 | -                | -                    | -                                                     | 16              | -                 | 16             | -                         | -              | -                         |
| OTHER AGENCIES                          |                                   |                  |                      |                                                       |                 |                   |                |                           |                |                           |
| ACTION.....                             | -                                 | -                | -                    | -                                                     | 159             | -                 | -              | -                         | 159            | -                         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | -                                 | -                | -                    | -                                                     | 1,659           | -                 | 829            | 830                       | -              | -                         |
| APPALACHIAN REGIONAL COMMISSION.....    | -                                 | -                | -                    | -                                                     | 600             | -                 | 600            | -                         | -              | -                         |
| CIVIL AERONAUTICS BOARD.....            | -                                 | -                | -                    | -                                                     | 734             | -                 | 734            | -                         | -              | -                         |
| COMMUNITY SERVICES ADMINISTRATION.....  | -                                 | -                | -                    | -                                                     | 1,000           | -                 | -              | -                         | 1,000          | -                         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | -                                 | -                | -                    | -                                                     | 293             | -                 | -              | -                         | -              | 293                       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 3,091                             | 1,991            | 1,100                | -                                                     | 3,600           | -                 | 2,650          | -                         | 950            | -                         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 102                               | -                | -                    | 102                                                   | 1,494           | -                 | 1,494          | -                         | -              | -                         |
| FEDERAL HOME LOAN BANK BOARD.....       | -                                 | -                | -                    | -                                                     | 1,113           | -                 | 1,113          | -                         | -              | -                         |
| FEDERAL TRADE COMMISSION.....           | -                                 | -                | -                    | -                                                     | 881             | -                 | 881            | -                         | -              | -                         |
| GENERAL SERVICES ADMINISTRATION.....    | -                                 | -                | -                    | -                                                     | 59              | -                 | 59             | -                         | -              | -                         |
| INTERSTATE COMMERCE COMMISSION.....     | 50                                | 50               | -                    | -                                                     | 166             | -                 | 166            | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 25,701                            | 22,744           | 2,957                | -                                                     | 513             | -                 | 428            | 33                        | -              | 50                        |
| NATIONAL SCIENCE FOUNDATION.....        | 2,719                             | 477              | 2,242                | -                                                     | 15,936          | -                 | 1,753          | 236                       | 327            | 13,620                    |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 196                               | -                | 100                  | 96                                                    | 1,070           | -                 | -              | 1,070                     | -              | -                         |
| US INTERNATIONAL TRADE COMMISSION.....  | -                                 | -                | -                    | -                                                     | 2,622           | -                 | 2,622          | -                         | -              | -                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-66. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE; FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                    | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-------------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                           | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEG | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEG |
| TOTAL, ALL AGENCIES.....                  | 129,015                           | 52,378           | 65,441               | 11,196                                                   | 428,417         | 6,359             | 141,912        | 7,621                     | 56,311         | 216,214                   |
| DEPARTMENTS                               |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....     | 3,158                             | 3,158            | -                    | -                                                        | 53,354          | -                 | 50,747         | -                         | 2,502          | 605                       |
| ECON. STAT & COOPERATIVES SERVICE....     | 1,507                             | 1,507            | -                    | -                                                        | 29,019          | -                 | 27,774         | -                         | 806            | 538                       |
| FOREST SERVICE.....                       | 816                               | 816              | -                    | -                                                        | 5,642           | -                 | 4,894          | -                         | 748            | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION..... | 835                               | 835              | -                    | -                                                        | 19,193          | -                 | 18,178         | -                         | 948            | 67                        |
| COOPERATIVE RESEARCH.....                 | -                                 | -                | -                    | -                                                        | 17,889          | -                 | 16,658         | -                         | 931            | -                         |
| FEDERAL RESEARCH.....                     | 835                               | 835              | -                    | -                                                        | 1,604           | -                 | 1,520          | -                         | 17             | 67                        |
| DEPARTMENT OF COMMERCE, TOTAL.....        | 13,274                            | 2,236            | 11,038               | -                                                        | 9,605           | -                 | 9,344          | -                         | 261            | -                         |
| BUREAU OF THE CENSUS.....                 | 1,463                             | 1,222            | 241                  | -                                                        | 574             | -                 | 313            | -                         | 261            | -                         |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....  | -                                 | -                | -                    | -                                                        | 3,500           | -                 | 3,500          | -                         | -              | -                         |
| MARITIME ADMINISTRATION.....              | -                                 | -                | -                    | -                                                        | 250             | -                 | 250            | -                         | -              | -                         |
| NATIONAL BUREAU OF STANDARDS.....         | 11,674                            | 877              | 10,797               | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL FIRE PREV & CONTROL ADMIN.....   | 137                               | 137              | -                    | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....     | -                                 | -                | -                    | -                                                        | 4,481           | -                 | 4,481          | -                         | -              | -                         |
| OFFICE OF MINORITY BUSINESS ENTERP.....   | -                                 | -                | -                    | -                                                        | 800             | -                 | 800            | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....         | 66,990                            | 11,707           | 45,217               | 10,066                                                   | 28,068          | -                 | 1,091          | 2,143                     | 905            | 23,929                    |
| DEPARTMENT OF THE ARMY.....               | 9,459                             | 3,547            | 5,912                | -                                                        | 25,561          | -                 | 779            | -                         | 853            | 23,929                    |
| DEPARTMENT OF THE NAVY.....               | 28,414                            | 5,498            | 41,808               | 1,108                                                    | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF THE AIR FORCE.....          | 577                               | 265              | 312                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                     | 27,916                            | 1,981            | 16,977               | 8,958                                                    | 1,415           | -                 | 1,415          | -                         | -              | -                         |
| DEPARTMENT-WIDE FUNDS.....                | 624                               | 416              | 208                  | -                                                        | 1,092           | -                 | 312            | 728                       | 52             | -                         |
| DEPARTMENT OF ENERGY.....                 | 1,000                             | -                | 1,000                | -                                                        | 3,500           | -                 | 1,330          | -                         | 1,470          | 700                       |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL    | 5,458                             | 5,258            | 200                  | -                                                        | 192,778         | 2,750             | 15,693         | 456                       | 23,149         | 150,643                   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....  | 1,428                             | 1,428            | -                    | -                                                        | 19,215          | 2,750             | 211            | 207                       | 14,206         | 1,841                     |
| HEALTH CARE FINANCING ADMINISTRATION..... | -                                 | -                | -                    | -                                                        | 38,552          | -                 | -              | -                         | -              | 38,552                    |
| HUMAN DEVELOPMENT SERVICES.....           | 200                               | -                | 200                  | -                                                        | 26,109          | -                 | 173            | -                         | 1,854          | 24,082                    |
| NATIONAL INSTITUTE OF EDUCATION.....      | -                                 | -                | -                    | -                                                        | 23,100          | -                 | -              | -                         | -              | 23,100                    |
| NATIONAL INSTITUTES OF HEALTH.....        | 3,830                             | 3,830            | -                    | -                                                        | 6,959           | -                 | -              | -                         | -              | 6,959                     |
| OFFICE OF EDUCATION.....                  | -                                 | -                | -                    | -                                                        | 16,727          | -                 | -              | -                         | -              | 16,727                    |
| OFFICE OF ASS'T SECTY FOR EDUCATION.....  | -                                 | -                | -                    | -                                                        | 1,042           | -                 | -              | -                         | -              | 1,042                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....     | -                                 | -                | -                    | -                                                        | 25,540          | -                 | 994            | 249                       | 994            | 23,303                    |
| OFFICE OF THE SECRETARY.....              | -                                 | -                | -                    | -                                                        | 20,450          | -                 | 14,315         | -                         | 6,135          | -                         |
| SOCIAL SECURITY ADMINISTRATION.....       | -                                 | -                | -                    | -                                                        | 15,084          | -                 | -              | -                         | -              | 15,084                    |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....  | -                                 | -                | -                    | -                                                        | 32,363          | -                 | 16,543         | -                         | -              | 15,820                    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....    | 3,002                             | 1,832            | 1,050                | 120                                                      | 6,228           | 3,609             | 943            | 750                       | 498            | 428                       |
| BUREAU OF LAND MANAGEMENT.....            | -                                 | -                | -                    | -                                                        | 101             | -                 | -              | -                         | 101            | -                         |
| BUREAU OF MINES.....                      | 1,700                             | 1,700            | -                    | -                                                        | 115             | -                 | 115            | -                         | -              | -                         |
| BUREAU OF RECLAMATION.....                | -                                 | -                | -                    | -                                                        | 170             | -                 | 120            | -                         | 50             | -                         |
| GEOLOGICAL SURVEY.....                    | 1,182                             | 132              | 1,050                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| NATIONAL PARK SERVICE.....                | -                                 | -                | -                    | -                                                        | 4,013           | 3,599             | 181            | -                         | 179            | 218                       |
| OFFICE OF WATER RES AND TECHNOLOGY.....   | 120                               | -                | -                    | 120                                                      | 1,920           | 10                | 690            | 750                       | 260            | 210                       |
| DEPARTMENT OF JUSTICE, TOTAL.....         | 150                               | -                | -                    | 50                                                       | 18,110          | -                 | 228            | -                         | 11,688         | 6,194                     |
| BUREAU OF PRISONS.....                    | -                                 | -                | -                    | -                                                        | 1,331           | -                 | 228            | -                         | 343            | 760                       |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....     | 150                               | -                | -                    | 150                                                      | 14,779          | -                 | -              | -                         | 11,345         | 3,434                     |
| OFFICE OF THE ATTORNEY GENERAL.....       | -                                 | -                | -                    | -                                                        | 2,000           | -                 | -              | -                         | -              | 2,000                     |
| DEPARTMENT OF LABOR, TOTAL.....           | -                                 | -                | -                    | -                                                        | 22,625          | -                 | 22,096         | -                         | 529            | -                         |
| BUREAU OF LABOR STATISTICS.....           | -                                 | -                | -                    | -                                                        | 860             | -                 | 860            | -                         | -              | -                         |
| EMPLOYMENT AND TRAINING ADMIN.....        | -                                 | -                | -                    | -                                                        | 5,021           | -                 | 4,492          | -                         | 529            | -                         |
| EMPLOYMENT STANDARDS ADMINISTRATION.....  | -                                 | -                | -                    | -                                                        | 5,593           | -                 | 5,593          | -                         | -              | -                         |
| LABOR-MANAGEMENT SERVICES ADMIN.....      | -                                 | -                | -                    | -                                                        | 2,935           | -                 | 2,935          | -                         | -              | -                         |
| OCCUPATIONAL SAFETY & HEALTH ADMIN.....   | -                                 | -                | -                    | -                                                        | 6,546           | -                 | 6,546          | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....              | -                                 | -                | -                    | -                                                        | 1,670           | -                 | 1,670          | -                         | -              | -                         |
| DEPARTMENT OF STATE, TOTAL.....           | -                                 | -                | -                    | -                                                        | 22,349          | -                 | 8,315          | 2,029                     | 9,205          | 2,800                     |
| DEPARTMENTAL FUNDS.....                   | -                                 | -                | -                    | -                                                        | 2,029           | -                 | -              | 2,029                     | -              | -                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT..... | -                                 | -                | -                    | -                                                        | 20,320          | -                 | 8,315          | -                         | 9,205          | 2,800                     |

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TABLE C-66. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

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| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEG | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEG |
| DEPT OF TRANSPORTATION, TOTAL.....      | 1,493                             | 293              | 454                  | 746                                                      | 1,461           | -                 | 1,290          | 171                       | -              | -                         |
| FEDERAL RAILROAD ADMINISTRATION.....    | 26                                | -                | 26                   | -                                                        | 9               | -                 | 9              | -                         | -              | -                         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 1,467                             | 293              | 428                  | 746                                                      | 260             | -                 | 260            | -                         | -              | -                         |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                        | 1,146           | -                 | 975            | 171                       | -              | -                         |
| US COAST GUARD.....                     | -                                 | -                | -                    | -                                                        | 46              | -                 | 46             | -                         | -              | -                         |
| OTHER AGENCIES                          |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| ACTION.....                             | -                                 | -                | -                    | -                                                        | 3,882           | -                 | -              | -                         | 3,882          | -                         |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | -                                 | -                | -                    | -                                                        | 1,664           | -                 | 832            | 832                       | -              | -                         |
| APPALACHIAN REGIONAL COMMISSION.....    | -                                 | -                | -                    | -                                                        | 600             | -                 | 600            | -                         | -              | -                         |
| CIVIL AERONAUTICS BOARD.....            | -                                 | -                | -                    | -                                                        | 836             | -                 | 836            | -                         | -              | -                         |
| COMMUNITY SERVICES ADMINISTRATION.....  | -                                 | -                | -                    | -                                                        | 1,000           | -                 | -              | -                         | 1,000          | -                         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | -                                 | -                | -                    | -                                                        | 341             | -                 | -              | -                         | -              | 341                       |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 3,200                             | 2,000            | 1,200                | -                                                        | 3,600           | -                 | 2,700          | -                         | 900            | -                         |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 84                                | -                | -                    | 84                                                       | 1,796           | -                 | 1,796          | -                         | -              | -                         |
| FEDERAL HOME LOAN BANK BOARD.....       | -                                 | -                | -                    | -                                                        | 1,316           | -                 | 1,316          | -                         | -              | -                         |
| FEDERAL TRADE COMMISSION.....           | -                                 | -                | -                    | -                                                        | 875             | -                 | 875            | -                         | -              | -                         |
| INTERSTATE COMMERCE COMMISSION.....     | 30                                | 30               | -                    | -                                                        | 35              | -                 | 35             | -                         | -              | -                         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 27,798                            | 25,173           | 2,625                | -                                                        | 517             | -                 | 432            | 35                        | -              | 50                        |
| NATIONAL SCIENCE FOUNDATION.....        | 3,148                             | 691              | 2,457                | -                                                        | 16,839          | -                 | 1,695          | 205                       | 282            | 14,657                    |
| SMALL BUSINESS ADMINISTRATION.....      | -                                 | -                | -                    | -                                                        | 55              | -                 | 55             | -                         | -              | -                         |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 230                               | -                | 200                  | 30                                                       | 1,454           | -                 | 454            | 1,000                     | -              | -                         |
| US INTERNATIONAL TRADE COMMISSION.....  | -                                 | -                | -                    | -                                                        | 2,666           | -                 | 2,666          | -                         | -              | -                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-67. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL      | INFRA-<br>RURAL (1) | UNITED STATES AND TERRITORIES |                                                |                                      |                                                |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|----------------------------------------|------------|---------------------|-------------------------------|------------------------------------------------|--------------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|---------|
|                                        |            |                     | INDUSTRIAL<br>FIRMS           | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS<br>AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |                                |         |
| TOTAL, ALL AGENCIES.....               | 15,087,905 | 3,104,564           | 9,511,686                     | 913,200                                        | 273,656                              | 655,597                                        | 273,058                                      | 208,362                                                   | 118,172                        | 29,522  |
| DEPARTMENTS                            |            |                     |                               |                                                |                                      |                                                |                                              |                                                           |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 22,943     | 20,580              | 1,069                         | -                                              | 1,124                                | -                                              | 11                                           | -                                                         | -                              | 159     |
| ECON, STAT & COOPERATIVES SERVICE....  | 823        | 763                 | -                             | -                                              | 60                                   | -                                              | -                                            | -                                                         | -                              | -       |
| FOREST SERVICE.....                    | 4,152      | 4,152               | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| SCIENCE AND EDUCATION ADMINISTRATION   | 17,968     | 15,665              | 1,069                         | -                                              | 1,064                                | -                                              | 11                                           | -                                                         | -                              | 159     |
| FEDERAL RESEARCH.....                  | 17,968     | 15,665              | 1,069                         | -                                              | 1,064                                | -                                              | 11                                           | -                                                         | -                              | 159     |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 64,592     | 31,047              | 17,240                        | -                                              | 8,993                                | 67                                             | 5,411                                        | 223                                                       | 5,611                          | -       |
| BUREAU OF THE CENSUS.....              | 626        | 626                 | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 12,500     | 256                 | 507                           | -                                              | 4,545                                | -                                              | 2,260                                        | -                                                         | 4,932                          | -       |
| MARITIME ADMINISTRATION.....           | 11,100     | 989                 | 8,988                         | -                                              | 119                                  | -                                              | 641                                          | 223                                                       | 140                            | -       |
| NATIONAL BUREAU OF STANDARDS.....      | 8,269      | 8,148               | 81                            | -                                              | 40                                   | -                                              | -                                            | -                                                         | -                              | -       |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 2,100      | 1,068               | 157                           | -                                              | 213                                  | 37                                             | 313                                          | -                                                         | 312                            | -       |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 29,916     | 18,483              | 7,252                         | -                                              | 4,076                                | 30                                             | 75                                           | -                                                         | -                              | -       |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 900        | 900                 | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| OFFICE OF MINORITY BUSINESS ENTERP.... | 2,723      | 119                 | 255                           | -                                              | -                                    | -                                              | 2,122                                        | -                                                         | 227                            | -       |
| PATENT & TRADEMARK OFFICE.....         | 458        | 458                 | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 8,921,954  | 2,298,533           | 6,140,694                     | 108,973                                        | 19,822                               | 134,780                                        | 63,077                                       | 148,280                                                   | 16                             | 7,779   |
| DEPARTMENT OF THE ARMY.....            | 2,008,451  | 614,315             | 1,352,375                     | 210                                            | 12,533                               | 14,017                                         | 10,599                                       | 4,063                                                     | 16                             | 323     |
| DEPARTMENT OF THE NAVY.....            | 3,439,443  | 880,139             | 2,301,508                     | 108,763                                        | 3,049                                | 90,614                                         | 47,345                                       | 4,263                                                     | -                              | 3,762   |
| DEPARTMENT OF THE AIR FORCE.....       | 3,195,795  | 676,515             | 2,346,745                     | -                                              | 3,678                                | 28,387                                         | 3,332                                        | 133,444                                                   | -                              | 3,694   |
| DEFENSE AGENCIES.....                  | 2,448,026  | 101,075             | 138,248                       | -                                              | 562                                  | 1,762                                          | 1,801                                        | 4,578                                                     | -                              | -       |
| DIRECTOR OF TEST & EVALUATION, DEF..   | 30,239     | 26,489              | 1,818                         | -                                              | -                                    | -                                              | -                                            | 1,932                                                     | -                              | -       |
| DEPARTMENT OF ENERGY.....              | 2,644,954  | 110,700             | 1,128,701                     | 804,209                                        | 54,254                               | 455,993                                        | 20,043                                       | 45,836                                                    | 14,847                         | 10,371  |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 353,616    | 30,922              | 58,958                        | -                                              | 135,990                              | -                                              | 95,702                                       | 801                                                       | 25,259                         | 5,984   |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 1,021      | 25                  | 996                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| HEALTH SERVICES ADMINISTRATION.....    | 8,132      | 950                 | 1,660                         | -                                              | 3,282                                | -                                              | 1,980                                        | -                                                         | 260                            | -       |
| HUMAN DEVELOPMENT SERVICES.....        | 28,078     | 1,703               | 3,828                         | -                                              | 7,458                                | -                                              | 9,815                                        | -                                                         | 5,274                          | -       |
| NATIONAL INSTITUTE OF EDUCATION.....   | 37,764     | 7,500               | 3,827                         | -                                              | 6,180                                | -                                              | 16,787                                       | -                                                         | 3,317                          | 153     |
| NATIONAL INSTITUTES OF HEALTH.....     | 255,800    | 18,750              | 47,890                        | -                                              | 111,549                              | -                                              | 63,811                                       | 801                                                       | 7,168                          | 5,831   |
| OFFICE OF EDUCATION.....               | 19,193     | 558                 | 732                           | -                                              | 6,291                                | -                                              | 2,445                                        | -                                                         | 9,167                          | -       |
| OFFICE OF ASST SECTY FOR HEALTH.....   | 3,628      | 1,436               | 25                            | -                                              | 1,230                                | -                                              | 864                                          | -                                                         | 73                             | -       |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 19,384     | 6,156               | 4,295                         | -                                              | -                                    | -                                              | 6,787                                        | -                                                         | 2,146                          | -       |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 58,740     | 27,275              | 26,374                        | -                                              | 3,912                                | -                                              | -                                            | 202                                                       | 926                            | 51      |
| BUREAU OF LAND MANAGEMENT.....         | 62         | 62                  | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| BUREAU OF MINES.....                   | 49,592     | 20,926              | 24,059                        | -                                              | 3,652                                | -                                              | -                                            | 202                                                       | 662                            | 51      |
| BUREAU OF RECLAMATION.....             | 632        | 602                 | -                             | -                                              | 30                                   | -                                              | -                                            | -                                                         | -                              | -       |
| NATIONAL PARK SERVICE.....             | 300        | 110                 | -                             | -                                              | 190                                  | -                                              | -                                            | -                                                         | -                              | -       |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 2,754      | 175                 | 2,315                         | -                                              | -                                    | -                                              | -                                            | -                                                         | 266                            | -       |
| US FISH AND WILDLIFE SERVICE.....      | 5,400      | 5,400               | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 10,066     | 1,918               | 4,065                         | -                                              | 878                                  | -                                              | 1,421                                        | 1,764                                                     | -                              | -       |
| BUREAU OF PRISONS.....                 | 1,009      | 555                 | 20                            | -                                              | 162                                  | -                                              | 272                                          | -                                                         | -                              | -       |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 2,100      | 500                 | 850                           | -                                              | -                                    | -                                              | -                                            | 750                                                       | -                              | -       |
| FEDERAL BUREAU OF INVESTIGATION.....   | 1,400      | 200                 | 1,200                         | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| IMMIGRATION & NATURALIZATION SERVICE   | 148        | 37                  | 111                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 5,409      | 626                 | 1,904                         | -                                              | 716                                  | -                                              | 1,149                                        | 1,014                                                     | -                              | -       |
| DEPARTMENT OF LABOR, TOTAL.....        | 10,838     | 706                 | 3,156                         | -                                              | 2,885                                | -                                              | 3,749                                        | -                                                         | 342                            | -       |
| BUREAU OF LABOR STATISTICS.....        | 476        | 476                 | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| EMPLOYMENT AND TRAINING ADMIN.....     | 10,362     | 230                 | 3,156                         | -                                              | 2,885                                | -                                              | 3,749                                        | -                                                         | 342                            | -       |
| DEPARTMENT OF STATE, TOTAL.....        | 23,136     | 473                 | 1,224                         | -                                              | 5,855                                | -                                              | 14,275                                       | -                                                         | -                              | 1,309   |
| DEPARTMENTAL FUNDS.....                | 215        | 15                  | 200                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -                              | -       |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 22,921     | 458                 | 1,024                         | -                                              | 5,855                                | -                                              | 14,275                                       | -                                                         | -                              | 1,309   |
| DEPT OF TRANSPORTATION, TOTAL.....     | 302,844    | 71,965              | 141,156                       | -                                              | 17,570                               | 719                                            | 3,024                                        | 10,552                                                    | 57,524                         | 334     |
| FEDERAL AVIATION ADMINISTRATION.....   | 98,700     | 23,902              | 63,651                        | -                                              | 1,100                                | 200                                            | -                                            | 9,847                                                     | -                              | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....    | 50,200     | 8,380               | 4,514                         | -                                              | 8,700                                | -                                              | -                                            | -                                                         | 30,606                         | -       |
| FEDERAL RAILROAD ADMINISTRATION.....   | 35,300     | 9,828               | 22,264                        | -                                              | 400                                  | -                                              | 365                                          | 705                                                       | 1,738                          | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.... | 19,500     | 1,560               | 3,753                         | -                                              | 1,800                                | -                                              | 1,827                                        | -                                                         | 10,560                         | -       |
| OFFICE OF THE SECRETARY.....           | 23,844     | 10,767              | 8,990                         | -                                              | 3,050                                | 249                                            | 454                                          | -                                                         | -                              | 334     |
| US COAST GUARD.....                    | 16,400     | 3,580               | 11,652                        | -                                              | 520                                  | 270                                            | 378                                          | -                                                         | -                              | -       |
| URBAN MASS TRANSPORTATION ADMIN.....   | 58,900     | 15,948              | 26,332                        | -                                              | 2,000                                | -                                              | -                                            | -                                                         | 14,620                         | -       |

CONTINUED ON NEXT PAGE



TABLE C-67. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                    | TOTAL     | INTRA-MURAL (1) | EXTRAMURAL                    |                                  |                           |                                           |                               |                                         |                       |         |
|-------------------------------------------|-----------|-----------------|-------------------------------|----------------------------------|---------------------------|-------------------------------------------|-------------------------------|-----------------------------------------|-----------------------|---------|
|                                           |           |                 | UNITED STATES AND TERRITORIES |                                  |                           |                                           |                               |                                         |                       |         |
|                                           |           |                 | INDUSTRIAL FIRMS              | FFRDCS ADMIN BY INDUSTRIAL FIRMS | UNIVERSITIES AND COLLEGES | FFRDCS ADMIN BY UNIVERSITIES AND COLLEGES | OTHER NON-PROFIT INSTITUTIONS | FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS | STATE AND LOCAL GOVTS | FOREIGN |
| DEPARTMENT OF THE TREASURY, TOTAL.....    | 2,665     | 1,600           | 410                           | -                                | 150                       | -                                         | -                             | 305                                     | -                     | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS..... | 665       | 15              | 160                           | -                                | -                         | -                                         | -                             | 490                                     | -                     | -       |
| BUREAU OF ENGRAVING AND PRINTING.....     | 800       | 800             | -                             | -                                | -                         | -                                         | -                             | -                                       | -                     | -       |
| CUSTOMS SERVICE.....                      | 1,200     | 785             | 250                           | -                                | 150                       | -                                         | -                             | 15                                      | -                     | -       |
| OTHER AGENCIES                            |           |                 |                               |                                  |                           |                                           |                               |                                         |                       |         |
| ACTION.....                               | 370       | 29              | -                             | -                                | -                         | -                                         | 305                           | -                                       | 36                    | -       |
| APPALACHIAN REGIONAL COMMISSION.....      | 100       | 5               | 30                            | -                                | -                         | -                                         | -                             | -                                       | 65                    | -       |
| CIVIL SERVICE COMMISSION.....             | 2,920     | 1,320           | -                             | -                                | -                         | -                                         | -                             | -                                       | 1,500                 | -       |
| COMMUNITY SERVICES ADMINISTRATION.....    | 22,987    | 1,500           | -                             | -                                | -                         | -                                         | 21,487                        | -                                       | -                     | -       |
| CONSUMER PRODUCT SAFETY COMMISSION.....   | 3,018     | 1,512           | 1,102                         | -                                | -                         | -                                         | 404                           | -                                       | -                     | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 90,198    | 41,611          | 21,307                        | -                                | -                         | -                                         | 14,342                        | -                                       | 9,623                 | 3,315   |
| GENERAL SERVICES ADMINISTRATION.....      | 529       | 13              | 476                           | -                                | -                         | -                                         | 40                            | -                                       | -                     | -       |
| INTERNATIONAL COMMUNICATION AGENCY.....   | 33        | 33              | -                             | -                                | -                         | -                                         | -                             | -                                       | -                     | -       |
| LIBRARY OF CONGRESS.....                  | 3,400     | 3,060           | 340                           | -                                | -                         | -                                         | -                             | -                                       | -                     | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....   | 2,497,309 | 455,694         | 1,960,067                     | -                                | 15,869                    | 64,038                                    | 20,964                        | 199                                     | 258                   | 220     |
| NATIONAL SCIENCE FOUNDATION.....          | 8,719     | 3               | 826                           | -                                | 6,206                     | -                                         | 1,884                         | -                                       | -                     | -       |
| TENNESSEE VALLEY AUTHORITY.....           | 3,589     | 3,589           | -                             | -                                | -                         | -                                         | -                             | -                                       | -                     | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY...   | 442       | 60              | 230                           | 104                              | -                         | -                                         | 46                            | -                                       | -                     | -       |
| VETERANS ADMINISTRATION.....              | 16,659    | 14,260          | 146                           | -                                | 148                       | -                                         | 86                            | -                                       | 19                    | -       |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-48. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL      | INTRA-<br>MURAL (1) | UNITED STATES AND TERRITORIES |                                                |                                      |                                                 |                                              |                                                           |         | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|---------------------------------------------|------------|---------------------|-------------------------------|------------------------------------------------|--------------------------------------|-------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|---------|--------------------------------|---------|
|                                             |            |                     | INDUSTRIAL<br>FIRMS           | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS/<br>AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |         |                                |         |
| TOTAL, ALL AGENCIES.....                    | 10,561,939 | 3,305,045           | 10,522,182                    | 949,724                                        | 444,976                              | 619,043                                         | 292,736                                      | 249,391                                                   | 130,662 | 47,375                         |         |
| DEPARTMENTS                                 |            |                     |                               |                                                |                                      |                                                 |                                              |                                                           |         |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 25,921     | 22,290              | -                             | -                                              | 3,388                                | -                                               | -                                            | -                                                         | -       | -                              | 243     |
| ECON. STAT & COOPERATIVES SERVICE....       | 862        | 802                 | -                             | -                                              | 60                                   | -                                               | -                                            | -                                                         | -       | -                              | -       |
| FOREST SERVICE.....                         | 5,005      | 5,005               | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              | -       |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 20,054     | 16,483              | -                             | -                                              | 3,328                                | -                                               | -                                            | -                                                         | -       | -                              | 243     |
| FEDERAL RESEARCH.....                       | 20,054     | 16,483              | -                             | -                                              | 3,328                                | -                                               | -                                            | -                                                         | -       | -                              | 243     |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 94,495     | 34,351              | 21,440                        | -                                              | 10,200                               | 49                                              | 7,729                                        | 200                                                       | 10,524  | -                              | -       |
| BUREAU OF THE CENSUS.....                   | 1,124      | 1,124               | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              | -       |
| ECONOMIC DEVELOPMENT ADMINISTRATION.....    | 31,600     | 632                 | 1,264                         | -                                              | 4,750                                | -                                               | 14,842                                       | -                                                         | 10,112  | -                              | -       |
| NAVITIME ADMINISTRATION.....                | 15,300     | 800                 | 11,840                        | -                                              | 200                                  | -                                               | 260                                          | 200                                                       | -       | -                              | -       |
| NATIONAL BUREAU OF STANDARDS.....           | 8,100      | 8,060               | -                             | -                                              | 40                                   | -                                               | -                                            | -                                                         | -       | -                              | -       |
| NATIONAL FIRE PREV & CONTROL ADMIN.....     | 2,394      | 825                 | 369                           | -                                              | 210                                  | 49                                              | 427                                          | -                                                         | 614     | -                              | -       |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 33,611     | 20,869              | 7,812                         | -                                              | 4,000                                | -                                               | 30                                           | -                                                         | -       | -                              | -       |
| NAT'L TELECOMMUN & INFO ADMIN.....          | 800        | 800                 | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              | -       |
| OFFICE OF MINORITY BUSINESS ENTERP.....     | 3,100      | 775                 | 155                           | -                                              | -                                    | -                                               | 2,170                                        | -                                                         | -       | -                              | -       |
| PATENT & TRADEMARK OFFICE.....              | 466        | 466                 | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              | -       |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 9,641,387  | 2,431,594           | 6,704,094                     | 101,783                                        | 186,387                              | 53,415                                          | 63,724                                       | 167,247                                                   | 7       | 23,136                         |         |
| DEPARTMENT OF THE ARMY.....                 | 2,162,701  | 682,900             | 1,485,023                     | 100                                            | 10,962                               | 16,041                                          | 8,510                                        | 5,689                                                     | 7       | 3,469                          |         |
| DEPARTMENT OF THE NAVY.....                 | 3,653,794  | 882,809             | 2,453,319                     | 101,682                                        | 150,100                              | 6,059                                           | 49,444                                       | 4,726                                                     | -       | 5,644                          |         |
| DEPARTMENT OF THE AIR FORCE.....            | 3,533,496  | 691,736             | 2,640,907                     | -                                              | 3,556                                | 31,315                                          | 3,508                                        | 148,451                                                   | -       | 14,023                         |         |
| DEFENSE AGENCIES.....                       | 304,396    | 120,685             | 173,495                       | -                                              | 1,749                                | -                                               | 2,262                                        | 6,185                                                     | -       | -                              |         |
| DIRECTOR OF TEST & EVALUATION, DEF.....     | 27,000     | 23,464              | 1,350                         | -                                              | -                                    | -                                               | -                                            | 2,186                                                     | -       | -                              |         |
| DEPARTMENT OF ENERGY.....                   | 3,190,582  | 175,184             | 1,503,448                     | 847,943                                        | 58,448                               | 302,395                                         | 19,458                                       | 63,224                                                    | 11,712  | 6,770                          |         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 321,259    | 32,183              | 61,806                        | -                                              | 153,157                              | -                                               | 101,487                                      | 810                                                       | 24,859  | 6,957                          |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 683        | 25                  | 658                           | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| HEALTH SERVICES ADMINISTRATION.....         | 7,215      | 950                 | 1,660                         | -                                              | 2,073                                | -                                               | 2,234                                        | -                                                         | 298     | -                              |         |
| HUMAN DEVELOPMENT SERVICES.....             | 29,159     | 1,805               | 4,156                         | -                                              | 7,471                                | -                                               | 10,292                                       | -                                                         | 5,435   | -                              |         |
| NATIONAL INSTITUTE OF EDUCATION.....        | 47,600     | 8,206               | 4,760                         | -                                              | 8,568                                | -                                               | 21,677                                       | -                                                         | 4,189   | 200                            |         |
| NATIONAL INSTITUTES OF HEALTH.....          | 274,700    | 18,945              | 48,425                        | -                                              | 127,972                              | -                                               | 64,524                                       | 810                                                       | 7,247   | 6,737                          |         |
| OFFICE OF EDUCATION.....                    | 18,108     | 752                 | 2,114                         | -                                              | 5,472                                | -                                               | 2,176                                        | -                                                         | 7,594   | -                              |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....        | 3,794      | 1,480               | 33                            | -                                              | 1,601                                | -                                               | 584                                          | -                                                         | 96      | -                              |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT.....    | 30,437     | 9,800               | 8,407                         | -                                              | -                                    | -                                               | 8,900                                        | -                                                         | 3,330   | -                              |         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 76,366     | 35,797              | 35,485                        | -                                              | 4,284                                | -                                               | -                                            | 200                                                       | 600     | -                              |         |
| BUREAU OF LAND MANAGEMENT.....              | 91         | 91                  | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| BUREAU OF MINES.....                        | 61,229     | 28,429              | 28,000                        | -                                              | 4,000                                | -                                               | -                                            | 200                                                       | 600     | -                              |         |
| BUREAU OF RECLAMATION.....                  | 446        | 616                 | -                             | -                                              | 30                                   | -                                               | -                                            | -                                                         | -       | -                              |         |
| NATIONAL PARK SERVICE.....                  | 400        | 146                 | -                             | -                                              | 254                                  | -                                               | -                                            | -                                                         | -       | -                              |         |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 8,100      | 615                 | 7,485                         | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| US FISH AND WILDLIFE SERVICE.....           | 5,900      | 5,900               | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| DEPARTMENT OF JUSTICE, TOTAL.....           | 19,776     | 2,652               | 5,734                         | -                                              | 1,610                                | -                                               | 6,130                                        | 1,200                                                     | 2,450   | -                              |         |
| BUREAU OF PRISONS.....                      | 2,641      | 724                 | 30                            | -                                              | 387                                  | -                                               | 900                                          | -                                                         | 600     | -                              |         |
| DRUG ENFORCEMENT ADMINISTRATION.....        | 3,500      | 1,000               | 1,500                         | -                                              | -                                    | -                                               | -                                            | 1,000                                                     | -       | -                              |         |
| FEDERAL BUREAU OF INVESTIGATION.....        | 1,825      | 275                 | 1,550                         | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| IMMIGRATION & NATURALIZATION SERVICE.....   | 304        | 100                 | 204                           | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....       | 11,506     | 553                 | 2,450                         | -                                              | 1,223                                | -                                               | 5,230                                        | 200                                                       | 1,850   | -                              |         |
| DEPARTMENT OF LABOR, TOTAL.....             | 12,488     | 697                 | 3,008                         | -                                              | 2,888                                | -                                               | 4,446                                        | -                                                         | 1,449   | -                              |         |
| BUREAU OF LABOR STATISTICS.....             | 456        | 456                 | -                             | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| EMPLOYMENT AND TRAINING ADMIN.....          | 12,032     | 241                 | 3,008                         | -                                              | 2,888                                | -                                               | 4,446                                        | -                                                         | 1,449   | -                              |         |
| DEPARTMENT OF STATE, TOTAL.....             | 27,046     | 910                 | 2,630                         | -                                              | 8,647                                | -                                               | 8,490                                        | -                                                         | -       | 6,369                          |         |
| DEPARTMENTAL FUNDS.....                     | 500        | 60                  | 440                           | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 26,546     | 850                 | 2,190                         | -                                              | 8,647                                | -                                               | 8,490                                        | -                                                         | -       | 6,369                          |         |
| DEPT OF TRANSPORTATION, TOTAL.....          | 349,666    | 83,831              | 169,002                       | -                                              | 17,985                               | 560                                             | 3,364                                        | 12,413                                                    | 62,511  | -                              |         |
| FEDERAL AVIATION ADMINISTRATION.....        | 113,300    | 27,580              | 73,450                        | -                                              | 655                                  | 230                                             | -                                            | 11,385                                                    | -       | -                              |         |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 30,500     | 4,385               | 4,565                         | -                                              | 8,600                                | -                                               | -                                            | -                                                         | 30,950  | -                              |         |
| FEDERAL RAILROAD ADMINISTRATION.....        | 50,700     | 14,133              | 32,015                        | -                                              | 500                                  | -                                               | 325                                          | 1,028                                                     | 2,499   | -                              |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 19,300     | 1,542               | 3,710                         | -                                              | 1,800                                | -                                               | 1,800                                        | -                                                         | 10,442  | -                              |         |
| OFFICE OF THE SECRETARY.....                | 29,766     | 13,136              | 12,035                        | -                                              | 3,650                                | 330                                             | 615                                          | -                                                         | -       | -                              |         |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE..... | 900        | 200                 | 700                           | -                                              | -                                    | -                                               | -                                            | -                                                         | -       | -                              |         |
| US COAST GUARD.....                         | 18,000     | 3,950               | 12,852                        | -                                              | 780                                  | -                                               | 418                                          | -                                                         | -       | -                              |         |
| URBAN MASS TRANSPORTATION ADMIN.....        | 67,200     | 16,905              | 29,675                        | -                                              | 2,000                                | -                                               | -                                            | -                                                         | 18,620  | -                              |         |

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TABLE C-66. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                    | TOTAL     | INTRA-<br>MURAL (1) | UNITED STATES AND TERRITORIES |                                      |                                      |                                      |                                                 |                                              |        |       | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|-------------------------------------------|-----------|---------------------|-------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------------------|----------------------------------------------|--------|-------|--------------------------------|---------|
|                                           |           |                     | INDUSTRIAL<br>PLANS           | PPROCS                               |                                      | PPROCS                               |                                                 | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | PPROCS |       |                                |         |
|                                           |           |                     |                               | ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | ADMIN BY<br>UNIVS<br>AND<br>COLLEGES | ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |                                              |        |       |                                |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....    | 4,599     | 1,803               | 794                           | -                                    | -                                    | 100                                  | -                                               | -                                            | -      | 1,900 | -                              | -       |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS..... | 1,824     | 24                  | -                             | -                                    | -                                    | -                                    | -                                               | -                                            | -      | 1,800 | -                              | -       |
| BUREAU OF ENGRAVING AND PRINTING.....     | 900       | 55                  | 346                           | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | -                              | -       |
| CUSTOMS SERVICE.....                      | 14,875    | 1,229               | 450                           | -                                    | -                                    | 100                                  | -                                               | -                                            | -      | 100   | -                              | -       |
| OTHER AGENCIES                            |           |                     |                               |                                      |                                      |                                      |                                                 |                                              |        |       |                                |         |
| ACTION.....                               | 856       | 41                  | -                             | -                                    | -                                    | -                                    | -                                               | 635                                          | -      | -     | 180                            | -       |
| APPALACHIAN REGIONAL COMMISSION.....      | 200       | 10                  | 50                            | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | 140                            | -       |
| CIVIL SERVICE COMMISSION.....             | 3,217     | 1,217               | -                             | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | 2,000                          | -       |
| COMMUNITY SERVICES ADMINISTRATION.....    | 20,500    | 1,500               | -                             | -                                    | -                                    | -                                    | -                                               | 19,000                                       | -      | -     | -                              | -       |
| CONSUMER PRODUCT SAFETY COMMISSION.....   | 2,482     | 1,285               | 1,096                         | -                                    | -                                    | -                                    | -                                               | 100                                          | -      | -     | -                              | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 93,200    | 39,853              | 26,000                        | -                                    | -                                    | -                                    | -                                               | 16,897                                       | -      | -     | 10,600                         | 3,850   |
| GENERAL SERVICES ADMINISTRATION.....      | 490       | 18                  | 472                           | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | -                              | -       |
| INTERNATIONAL COMMUNICATION AGENCY.....   | 38        | 38                  | -                             | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | -                              | -       |
| LIBRARY OF CONGRESS.....                  | 3,900     | 3,624               | 276                           | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | -                              | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....   | 2,517,981 | 441,279             | 4,977,618                     | -                                    | -                                    | 14,000                               | 63,422                                          | 21,155                                       | 197    | 240   | 50                             | -       |
| NATIONAL SCIENCE FOUNDATION.....          | 5,273     | 2                   | 368                           | -                                    | -                                    | 3,743                                | -                                               | 1,160                                        | -      | -     | -                              | -       |
| TENNESSEE VALLEY AUTHORITY.....           | 4,764     | 4,764               | -                             | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | -                              | -       |
| US ARMS CONTROL & DISARMAMENT AGENCY..    | 405       | 80                  | 325                           | -                                    | -                                    | -                                    | -                                               | -                                            | -      | -     | -                              | -       |
| VETERANS ADMINISTRATION.....              | 14,611    | 14,241              | 132                           | -                                    | -                                    | 139                                  | -                                               | 81                                           | -      | -     | 18                             | -       |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-69. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL      | INTRA-<br>MURAL (1) | UNITED STATES AND TERRITORIES |                                                      |          |                                                      |                                      |                                 |              |        | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|----------------------------------------|------------|---------------------|-------------------------------|------------------------------------------------------|----------|------------------------------------------------------|--------------------------------------|---------------------------------|--------------|--------|--------------------------------|---------|
|                                        |            |                     | INDUSTRIAL<br>FIRMS           | PPFDCS<br>ADMIN BY UNIVER-<br>SITIES AND<br>COLLEGES |          | PPFDCS<br>ADMIN BY NON-<br>UNIVS AND<br>INSTITUTIONS |                                      | OTHER<br>PROFIT<br>INSTITUTIONS |              |        |                                |         |
|                                        |            |                     |                               | INDUS-<br>TRIAL<br>FIRMS                             | COLLEGES | UNIVS<br>AND<br>COLLEGES                             | NON-<br>UNIVS<br>AND<br>INSTITUTIONS | PROFIT<br>INSTITUTIONS          | INSTITUTIONS |        |                                |         |
| TOTAL, ALL AGENCIES.....               | 17,489,510 | 3,527,723           | 11,251,759                    | 946,539                                              | 446,234  | 629,462                                              | 288,040                              | 235,790                         | 123,169      | 40,838 |                                |         |
| DEPARTMENTS                            |            |                     |                               |                                                      |          |                                                      |                                      |                                 |              |        |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 24,537     | 20,201              | -                             | -                                                    | 4,131    | -                                                    | -                                    | -                               | -            | -      | 205                            |         |
| ECON. STAY & COOPERATIVES SERVICE....  | 862        | 802                 | -                             | -                                                    | 60       | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| FOREST SERVICE.....                    | 4,834      | 4,834               | -                             | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 18,841     | 14,565              | -                             | -                                                    | 4,071    | -                                                    | -                                    | -                               | -            | -      | 205                            |         |
| FEDERAL RESEARCH.....                  | 18,841     | 14,565              | -                             | -                                                    | 4,071    | -                                                    | -                                    | -                               | -            | -      | 205                            |         |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 95,026     | 37,792              | 16,753                        | 175                                                  | 14,685   | 53                                                   | 13,866                               | 200                             | 11,502       | -      | -                              |         |
| BUREAU OF THE CENSUS.....              | 1,130      | 1,130               | -                             | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 34,400     | 1,000               | 1,750                         | -                                                    | 9,635    | -                                                    | 11,219                               | -                               | 11,000       | -      | -                              |         |
| MARITIME ADMINISTRATION.....           | 11,300     | 1,000               | 9,700                         | -                                                    | 200      | -                                                    | 200                                  | 200                             | -            | -      | -                              |         |
| NATIONAL BUREAU OF STANDARDS.....      | 9,889      | 9,889               | -                             | -                                                    | 40       | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| NATIONAL FIRE PREV & CONTROL ADMIN...  | 3,159      | 1,035               | 773                           | -                                                    | 310      | 53                                                   | 936                                  | -                               | 652          | -      | -                              |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 30,960     | 21,760              | 4,400                         | 175                                                  | 4,500    | -                                                    | 95                                   | -                               | 49           | -      | -                              |         |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 900        | 900                 | -                             | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 2,600      | 550                 | 130                           | -                                                    | -        | -                                                    | 1,820                                | -                               | -            | -      | -                              |         |
| PATENT & TRADEMARK OFFICE.....         | 468        | 468                 | -                             | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 10,518,146 | 2,531,756           | 7,369,244                     | 116,717                                              | 166,545  | 48,262                                               | 52,402                               | 158,492                         | 15           | 24,718 | -                              |         |
| DEPARTMENT OF THE ARMY.....            | 2,356,826  | 782,479             | 1,516,263                     | 16,717                                               | 12,149   | 13,763                                               | 6,927                                | 6,288                           | 15           | 225    | -                              |         |
| DEPARTMENT OF THE NAVY.....            | 4,056,666  | 938,489             | 2,811,015                     | 130,030                                              | 150,100  | 5,872                                                | 99,936                               | 5,744                           | -            | 5,289  | -                              |         |
| DEPARTMENT OF THE AIR FORCE.....       | 3,730,200  | 752,111             | 2,788,092                     | -                                                    | 3,251    | 28,627                                               | 3,207                                | 135,708                         | -            | 19,204 | -                              |         |
| DEFENSE AGENCIES.....                  | 347,674    | 136,299             | 199,773                       | -                                                    | 1,045    | -                                                    | 2,332                                | 8,425                           | -            | -      | -                              |         |
| DIRECTOR OF TEST & EVALUATION, DEF...  | 27,000     | 22,573              | 2,100                         | -                                                    | -        | -                                                    | -                                    | 2,327                           | -            | -      | -                              |         |
| DEPARTMENT OF ENERGY.....              | 3,100,614  | 189,269             | 1,447,182                     | 829,497                                              | 46,001   | 493,391                                              | 18,460                               | 62,512                          | 19,292       | 4,100  | -                              |         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 385,243    | 30,575              | 64,336                        | -                                                    | 157,563  | -                                                    | 105,959                              | 839                             | 19,971       | 6,000  | -                              |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 1,837      | 25                  | 1,812                         | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| HEALTH SERVICES ADMINISTRATION.....    | 7,219      | 950                 | 1,650                         | -                                                    | 2,073    | -                                                    | 2,234                                | -                               | 298          | -      | -                              |         |
| HUMAN DEVELOPMENT SERVICES.....        | 31,897     | 1,847               | 9,129                         | -                                                    | 8,012    | -                                                    | 11,080                               | -                               | 5,829        | -      | -                              |         |
| NATIONAL INSTITUTE OF EDUCATION.....   | 47,500     | 7,294               | 4,750                         | -                                                    | 9,025    | -                                                    | 22,001                               | -                               | 4,180        | 250    | -                              |         |
| NATIONAL INSTITUTES OF HEALTH.....     | 275,500    | 17,810              | 67,030                        | -                                                    | 129,483  | -                                                    | 66,720                               | 839                             | 7,866        | 5,750  | -                              |         |
| OFFICE OF EDUCATION.....               | 16,374     | 888                 | 3,924                         | -                                                    | 7,282    | -                                                    | 2,578                                | -                               | 1,702        | -      | -                              |         |
| OFFICE OF ASS'T SECY FOR HEALTH.....   | 4,920      | 1,761               | 31                            | -                                                    | 1,686    | -                                                    | 1,346                                | -                               | 96           | -      | -                              |         |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 32,709     | 11,300              | 9,109                         | -                                                    | -        | -                                                    | 9,000                                | -                               | 3,300        | -      | -                              |         |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 61,422     | 24,736              | 31,600                        | -                                                    | 4,486    | -                                                    | -                                    | 200                             | 500          | -      | -                              |         |
| BUREAU OF LAND MANAGEMENT.....         | 102        | 102                 | -                             | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| BUREAU OF MINES.....                   | 45,692     | 16,736              | 24,000                        | -                                                    | 4,158    | -                                                    | -                                    | 200                             | 500          | -      | -                              |         |
| BUREAU OF RECLAMATION.....             | 858        | 850                 | -                             | -                                                    | 8        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| NATIONAL PARK SERVICE.....             | 500        | 180                 | -                             | -                                                    | 320      | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 8,170      | 570                 | 7,600                         | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| US FISH AND WILDLIFE SERVICE.....      | 6,300      | 6,300               | -                             | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 10,960     | 1,882               | 3,195                         | -                                                    | 965      | -                                                    | 3,143                                | 550                             | 1,225        | -      | -                              |         |
| BUREAU OF PRISONS.....                 | 1,645      | 510                 | 29                            | -                                                    | 590      | -                                                    | 200                                  | -                               | 225          | -      | -                              |         |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 1,400      | 400                 | 600                           | -                                                    | -        | -                                                    | -                                    | 400                             | -            | -      | -                              |         |
| FEDERAL BUREAU OF INVESTIGATION.....   | 1,275      | 225                 | 1,050                         | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| IMMIGRATION & NATURALIZATION SERVICE   | 300        | 75                  | 225                           | -                                                    | -        | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 6,340      | 572                 | 1,300                         | -                                                    | 375      | -                                                    | 2,943                                | 150                             | 1,000        | -      | -                              |         |
| DEPARTMENT OF LABOR, TOTAL.....        | 8,585      | 86                  | 3,076                         | -                                                    | 1,131    | -                                                    | 2,833                                | -                               | 1,459        | -      | -                              |         |
| EMPLOYMENT AND TRAINING ADMIN.....     | 8,585      | 86                  | 3,076                         | -                                                    | 1,131    | -                                                    | 2,833                                | -                               | 1,459        | -      | -                              |         |
| DEPARTMENT OF STATE, TOTAL.....        | 32,660     | 765                 | 4,955                         | -                                                    | 11,558   | 80                                                   | 12,597                               | 240                             | -            | 2,465  | -                              |         |
| DEPARTMENTAL FUNDS.....                | 500        | 15                  | 405                           | -                                                    | -        | -                                                    | 80                                   | -                               | -            | -      | -                              |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 32,160     | 750                 | 4,550                         | -                                                    | 11,558   | -                                                    | 12,597                               | 240                             | -            | 2,465  | -                              |         |
| DEPT OF TRANSPORTATION, TOTAL.....     | 312,076    | 77,183              | 143,754                       | -                                                    | 19,310   | 200                                                  | 2,689                                | 10,577                          | 61,363       | -      | -                              |         |
| FEDERAL AVIATION ADMINISTRATION.....   | 98,900     | 24,935              | 64,010                        | -                                                    | 730      | 200                                                  | -                                    | 9,925                           | -            | -      | -                              |         |
| FEDERAL HIGHWAY ADMINISTRATION.....    | 51,900     | 8,530               | 4,703                         | -                                                    | 8,800    | -                                                    | -                                    | -                               | 31,870       | -      | -                              |         |
| FEDERAL RAILROAD ADMINISTRATION.....   | 32,900     | 9,095               | 20,605                        | -                                                    | 600      | -                                                    | 338                                  | 652                             | 1,510        | -      | -                              |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN...  | 21,700     | 1,700               | 4,091                         | -                                                    | 2,400    | -                                                    | 1,991                                | -                               | 11,518       | -      | -                              |         |
| OFFICE OF THE SECRETARY.....           | 13,516     | 9,216               | 4,200                         | -                                                    | 100      | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| RESEARCH & SPECIAL PROGRAM DIRECTRTE   | 11,860     | 5,352               | 2,608                         | -                                                    | 3,900    | -                                                    | -                                    | -                               | -            | -      | -                              |         |
| US COAST GUARD.....                    | 19,600     | 3,400               | 11,060                        | -                                                    | 780      | -                                                    | 360                                  | -                               | -            | -      | -                              |         |
| URBAN MASS TRANSPORTATION ADMIN.....   | 65,700     | 17,855              | 29,480                        | -                                                    | 2,000    | -                                                    | -                                    | -                               | 16,365       | -      | -                              |         |

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TABLE C-69. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER: FISCAL YEAR 1979 (ESTIMATED)

- CONTINUED

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL     | INTRA-<br>MURAL (1) | EXTRAMURAL                    |                                                |                                      |                                                |                                              |                                                           |        |       | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|-----------------------------------------|-----------|---------------------|-------------------------------|------------------------------------------------|--------------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------|-------|--------------------------------|---------|
|                                         |           |                     | UNITED STATES AND TERRITORIES |                                                |                                      |                                                |                                              |                                                           |        |       |                                |         |
|                                         |           |                     | INDUSTRIAL<br>FIRMS           | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS<br>AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS |        |       |                                |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 5,140     | 2,193               | 857                           | -                                              | 150                                  | -                                              | -                                            | 1,940                                                     | -      | -     | -                              |         |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 2,040     | 300                 | -                             | -                                              | -                                    | -                                              | -                                            | 1,740                                                     | -      | -     | -                              |         |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,100     | 743                 | 357                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -      | -     | -                              |         |
| CUSTOMS SERVICE.....                    | 2,000     | 1,150               | 500                           | -                                              | 150                                  | -                                              | -                                            | 200                                                       | -      | -     | -                              |         |
| OTHER AGENCIES                          |           |                     |                               |                                                |                                      |                                                |                                              |                                                           |        |       |                                |         |
| ACTION.....                             | 1,692     | 42                  | -                             | -                                              | -                                    | -                                              | 1,650                                        | -                                                         | -      | -     | -                              |         |
| APPALACHIAN REGIONAL COMMISSION.....    | 200       | 10                  | 50                            | -                                              | -                                    | -                                              | -                                            | -                                                         | 140    | -     | -                              |         |
| CIVIL SERVICE COMMISSION.....           | 3,217     | 1,217               | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | 2,000  | -     | -                              |         |
| COMMUNITY SERVICES ADMINISTRATION.....  | 26,000    | 1,500               | -                             | -                                              | -                                    | -                                              | 24,500                                       | -                                                         | -      | -     | -                              |         |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 2,950     | 1,412               | 1,408                         | -                                              | -                                    | -                                              | 130                                          | -                                                         | -      | -     | -                              |         |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 93,900    | 37,400              | 26,000                        | -                                              | -                                    | -                                              | 16,000                                       | -                                                         | 11,000 | 3,300 | -                              |         |
| GENERAL SERVICES ADMINISTRATION.....    | 711       | 23                  | 688                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -      | -     | -                              |         |
| INTERNATIONAL COMMUNICATION AGENCY..... | 25        | 25                  | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -      | -     | -                              |         |
| LIBRARY OF CONGRESS.....                | 4,300     | 3,800               | 500                           | -                                              | -                                    | -                                              | -                                            | -                                                         | -      | -     | -                              |         |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 2,740,808 | 434,816             | 2,180,891                     | -                                              | 14,000                               | 87,566                                         | 23,005                                       | 200                                                       | 280    | 50    | -                              |         |
| NATIONAL SCIENCE FOUNDATION.....        | 7,850     | 3                   | 550                           | -                                              | 5,571                                | -                                              | 1,724                                        | -                                                         | -      | -     | -                              |         |
| TENNESSEE VALLEY AUTHORITY.....         | 5,278     | 5,278               | -                             | -                                              | -                                    | -                                              | -                                            | -                                                         | -      | -     | -                              |         |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 750       | 120                 | 480                           | 150                                            | -                                    | -                                              | -                                            | -                                                         | -      | -     | -                              |         |
| VETERANS ADMINISTRATION.....            | 14,511    | 14,144              | 131                           | -                                              | 138                                  | -                                              | 80                                           | -                                                         | 10     | -     | -                              |         |

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-70. FEDERAL FUNDS FOR R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | OBLIGATIONS |           |         | OUTLAYS |           |         |
|-----------------------------------------------------------|-------------|-----------|---------|---------|-----------|---------|
|                                                           | 1977        | ESTIMATES |         | 1977    | ESTIMATES |         |
|                                                           |             | 1978      | 1979    |         | 1978      | 1979    |
| TOTAL, ALL AGENCIES.....                                  | 1,367.2     | 1,667.4   | 1,347.9 | 890.2   | 1,308.3   | 1,403.6 |
| DEPARTMENTS                                               |             |           |         |         |           |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                     | 12.9        | 32.6      | 15.2    | 22.5    | 36.6      | 21.7    |
| FOREST SERVICE.....                                       | 1.8         | 2.6       | -       | 3.5     | 3.5       | .8      |
| SCIENCE AND EDUCATION ADMINISTRATION.....                 | 11.1        | 30.0      | 15.2    | 19.0    | 33.1      | 20.9    |
| COOPERATIVE RESEARCH.....                                 | -           | -         | -       | .1      | -         | -       |
| FEDERAL RESEARCH.....                                     | 11.1        | 30.0      | 15.2    | 18.9    | 33.1      | 20.9    |
| DEPARTMENT OF COMMERCE, TOTAL.....                        | 7.1         | 9.2       | 4.2     | 5.7     | 7.3       | 4.2     |
| MARITIME ADMINISTRATION.....                              | 4.9         | 4.9       | 4.0     | 3.7     | 3.7       | 3.0     |
| NATIONAL BUREAU OF STANDARDS.....                         | .7          | 2.0       | .2      | .6      | 1.4       | 1.2     |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....      | 1.5         | 2.3       | -       | 1.4     | 2.3       | -       |
| DEPARTMENT OF DEFENSE, TOTAL.....                         | 445.6       | 301.1     | 214.4   | 125.6   | 398.7     | 361.3   |
| DEPARTMENT OF THE ARMY.....                               | 16.3        | 32.9      | 37.9    | 14.8    | 20.4      | 34.0    |
| DEPARTMENT OF THE NAVY.....                               | 61.2        | 60.9      | 94.9    | 63.6    | 63.2      | 88.2    |
| DEPARTMENT OF THE AIR FORCE.....                          | 350.0       | 180.0     | 43.0    | 40.0    | 300.0     | 222.0   |
| DEFENSE AGENCIES.....                                     | 18.1        | 27.3      | 36.6    | 7.2     | 13.1      | 17.1    |
| DEPARTMENT OF ENERGY.....                                 | 561.0       | 939.4     | 790.7   | 427.1   | 591.9     | 660.6   |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 132.6       | 88.0      | 52.3    | 45.6    | 94.0      | 85.6    |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | -           | .4        | -       | -       | .1        | .3      |
| FOOD AND DRUG ADMINISTRATION.....                         | .8          | 3.2       | 1.2     | 4.3     | 1.7       | 4.8     |
| NATIONAL INSTITUTES OF HEALTH.....                        | 131.8       | 84.5      | 51.1    | 41.3    | 92.2      | 80.6    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                    | 5.0         | 17.8      | 2.9     | 4.4     | 13.4      | 4.8     |
| BUREAU OF MINES.....                                      | 3.4         | 9.3       | -       | 2.9     | 5.3       | 2.3     |
| NATIONAL PARK SERVICE.....                                | .9          | -         | -       | .6      | -         | -       |
| OFFICE OF WATER RESEARCH AND TECHNOLOGY.....              | .9          | 1.1       | 1.2     | .9      | 1.1       | 1.2     |
| UNITED STATES FISH AND WILDLIFE SERVICE.....              | .6          | 7.5       | 1.7     | .6      | 7.0       | 1.3     |
| DEPARTMENT OF STATE, TOTAL.....                           | 16.2        | .8        | 5.8     | 4.0     | 4.0       | 7.0     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                 | 16.2        | .8        | 5.8     | 4.0     | 4.0       | 7.0     |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                  | 22.5        | 29.6      | 20.6    | 17.3    | 24.6      | 18.4    |
| FEDERAL AVIATION ADMINISTRATION.....                      | 3.0         | 9.6       | .6      | 3.0     | 8.6       | 1.5     |
| FEDERAL HIGHWAY ADMINISTRATION.....                       | .4          | .4        | 1.3     | .4      | .4        | 1.3     |
| FEDERAL RAILROAD ADMINISTRATION.....                      | 10.6        | 16.9      | 16.0    | 11.7    | 13.0      | 13.0    |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....       | .2          | .2        | .2      | .2      | .2        | .2      |
| UNITED STATES COAST GUARD.....                            | .6          | .8        | .8      | .5      | .7        | .7      |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....             | 1.7         | 1.7       | 1.7     | 1.7     | 1.7       | 1.7     |
| DEPARTMENT OF THE TREASURY, TOTAL.....                    | .1          | 0         | .1      | .1      | 0         | .1      |
| CUSTOMS SERVICE.....                                      | .1          | 0         | .1      | .1      | 0         | .1      |
| OTHER AGENCIES                                            |             |           |         |         |           |         |
| CONSUMER PRODUCT SAFETY COMMISSION.....                   | -           | .4        | -       | -       | .4        | -       |
| ENVIRONMENTAL PROTECTION AGENCY.....                      | 2.1         | 3.3       | 2.6     | 1.6     | 2.6       | 2.7     |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....        | 118.1       | 162.3     | 152.5   | 105.0   | 132.3     | 134.0   |
| NATIONAL SCIENCE FOUNDATION.....                          | 27.1        | 36.6      | 38.9    | 25.1    | 34.5      | 35.6    |
| NUCLEAR REGULATORY COMMISSION.....                        | 7.1         | 7.9       | 8.4     | 6.1     | 9.8       | 8.5     |
| SMITHSONIAN INSTITUTION.....                              | .2          | .7        | .6      | .3      | .6        | .6      |
| TENNESSEE VALLEY AUTHORITY.....                           | 3.7         | 30.4      | 32.4    | 3.7     | 30.4      | 32.4    |
| VETERANS ADMINISTRATION.....                              | 5.9         | 7.1       | 6.2     | 5.9     | 7.1       | 6.2     |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-71. FEDERAL OBLIGATIONS FOR R&D PLANT, BY AGENCY AND PERFORMER OF THE RESEARCH AND DEVELOPMENT THE PLANT SUPPORTS:  
FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | FEDERAL<br>INTRA-<br>MURAL | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                      |                                      |                                             |                                              |                                                           |     |        | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|---------------------------------------------|-----------|----------------------------|---------------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|-----|--------|--------------------------------|---------|
|                                             |           |                            | INDUS-<br>TRIAL<br>FIRMS                    | ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN<br>BY NON-<br>PROFIT<br>INSTI-<br>TUTIONS |     |        |                                |         |
|                                             |           |                            |                                             |                                      |                                      |                                             |                                              |                                                           |     |        |                                |         |
| TOTAL, ALL AGENCIES.....                    | 1,367,200 | 711,893                    | 103,420                                     | 215,841                              | 33,683                               | 277,799                                     | 6,743                                        | 6,051                                                     | 600 | 11,170 |                                |         |
| DEPARTMENTS                                 |           |                            |                                             |                                      |                                      |                                             |                                              |                                                           |     |        |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 12,908    | 12,908                     | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| FOREST SERVICE.....                         | 1,792     | 1,792                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 11,116    | 11,116                     | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| FEDERAL RESEARCH.....                       | 11,116    | 11,116                     | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 7,090     | 2,055                      | 5,035                                       | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| MARITIME ADMINISTRATION.....                | 4,900     | 417                        | 4,483                                       | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| NATIONAL BUREAU OF STANDARDS.....           | 682       | 582                        | 100                                         | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 1,508     | 1,056                      | 452                                         | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 445,600   | 429,958                    | 12,030                                      | 75                                   | 2,279                                | 246                                         | 1,012                                        | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF THE ARMY.....                 | 16,300    | 16,300                     | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF THE NAVY.....                 | 61,200    | 61,200                     | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF THE AIR FORCE.....            | 350,000   | 350,000                    | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEFENSE AGENCIES.....                       | 18,100    | 2,458                      | 12,030                                      | 75                                   | 2,279                                | 246                                         | 1,012                                        | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF ENERGY.....                   | 561,017   | 7,546                      | 62,903                                      | 210,302                              | 17,982                               | 255,093                                     | 1,343                                        | 5,848                                                     | -   | -      | -                              |         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 132,640   | 116,640                    | -                                           | -                                    | 11,122                               | -                                           | 4,278                                        | -                                                         | 600 | -      | -                              |         |
| FOOD AND DRUG ADMINISTRATION.....           | 793       | 793                        | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| NATIONAL INSTITUTES OF HEALTH.....          | 131,847   | 115,847                    | -                                           | -                                    | 11,122                               | -                                           | 4,278                                        | -                                                         | 600 | -      | -                              |         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 4,972     | 4,067                      | 905                                         | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| BUREAU OF MINES.....                        | 3,430     | 3,430                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| NATIONAL PARK SERVICE.....                  | 2         | 2                          | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 905       | -                          | 905                                         | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| US FISH AND WILDLIFE SERVICE.....           | 635       | 635                        | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF STATE, TOTAL.....             | 16,170    | -                          | 5,000                                       | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | 11,170 | -                              |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 16,170    | -                          | 5,000                                       | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | 11,170 | -                              |         |
| DEPT OF TRANSPORTATION, TOTAL.....          | 22,500    | 10,480                     | 12,020                                      | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| FEDERAL AVIATION ADMINISTRATION.....        | 3,000     | 3,000                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 400       | 400                        | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| FEDERAL RAILROAD ADMINISTRATION.....        | 16,600    | 4,580                      | 12,020                                      | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 200       | 200                        | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| US COAST GUARD.....                         | 600       | 600                        | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,700     | 1,700                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 75        | 75                         | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| CUSTOMS SERVICE.....                        | 75        | 75                         | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| OTHER AGENCIES                              |           |                            |                                             |                                      |                                      |                                             |                                              |                                                           |     |        |                                |         |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 2,110     | 2,110                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 118,090   | 114,746                    | -                                           | -                                    | -                                    | 3,344                                       | -                                            | -                                                         | -   | -      | -                              |         |
| NATIONAL SCIENCE FOUNDATION.....            | 27,079    | 1,500                      | 5,500                                       | -                                    | 2,300                                | 17,779                                      | -                                            | -                                                         | -   | -      | -                              |         |
| NUCLEAR REGULATORY COMMISSION.....          | 7,141     | -                          | 27                                          | 5,464                                | -                                    | 1,337                                       | 110                                          | 203                                                       | -   | -      | -                              |         |
| SMITHSONIAN INSTITUTION.....                | 184       | 184                        | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| TENNESSEE VALLEY AUTHORITY.....             | 3,730     | 3,730                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |
| VETERANS ADMINISTRATION.....                | 3,894     | 3,894                      | -                                           | -                                    | -                                    | -                                           | -                                            | -                                                         | -   | -      | -                              |         |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-72. FEDERAL OBLIGATIONS FOR R&D PLANT, BY AGENCY AND PERFORMER OF THE RESEARCH AND DEVELOPMENT THE PLANT SUPPORTS:  
FISCAL YEAR 1970 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | FEDERAL<br>INTRA-<br>MURAL | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                                |                                      |                                             |                                              |                                                           |       | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
|---------------------------------------------|-----------|----------------------------|---------------------------------------------|------------------------------------------------|--------------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|-------|--------------------------------|---------|
|                                             |           |                            | INDUS-<br>TRIAL<br>FIRMS                    | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN<br>BY NON-<br>PROFIT<br>INSTI-<br>TUTIONS |       |                                |         |
| TOTAL, ALL AGENCIES.....                    | 1,667,413 | 641,992                    | 298,794                                     | 259,851                                        | 53,007                               | 399,581                                     | 4,760                                        | 6,840                                                     | 2,228 | 360                            |         |
| DEPARTMENTS                                 |           |                            |                                             |                                                |                                      |                                             |                                              |                                                           |       |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 32,632    | 32,632                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| FOREST SERVICE.....                         | 2,647     | 2,647                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 29,985    | 29,985                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| FEDERAL RESEARCH.....                       | 29,985    | 29,985                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 9,191     | 2,466                      | 4,450                                       | -                                              | 2,275                                | -                                           | -                                            | -                                                         | -     | -                              |         |
| MARITIME ADMINISTRATION.....                | 4,900     | 450                        | 4,450                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| NATIONAL BUREAU OF STANDARDS.....           | 2,016     | 2,016                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| NATIONAL OCEANIC AND ATMOS ADMIN.....       | 2,275     | -                          | -                                           | -                                              | 2,275                                | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 301,100   | 275,616                    | 22,393                                      | 15                                             | 2,330                                | 188                                         | 558                                          | -                                                         | -     | -                              |         |
| DEPARTMENT OF THE ARMY.....                 | 32,900    | 32,900                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEPARTMENT OF THE NAVY.....                 | 60,900    | 60,900                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEPARTMENT OF THE AIR FORCE.....            | 180,000   | 180,000                    | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEFENSE AGENCIES.....                       | 27,300    | 1,816                      | 22,393                                      | 15                                             | 2,330                                | 188                                         | 558                                          | -                                                         | -     | -                              |         |
| DEPARTMENT OF ENERGY.....                   | 939,479   | 22,300                     | 253,559                                     | 253,296                                        | 26,316                               | 371,654                                     | 3,359                                        | 6,697                                                     | 2,228 | -                              |         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 88,022    | 76,022                     | -                                           | -                                              | 11,500                               | -                                           | 500                                          | -                                                         | -     | -                              |         |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 350       | 350                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| FOOD AND DRUG ADMINISTRATION.....           | 3,150     | 3,150                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| NATIONAL INSTITUTES OF HEALTH.....          | 84,522    | 72,522                     | -                                           | -                                              | 11,500                               | -                                           | 500                                          | -                                                         | -     | -                              |         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 17,841    | 16,789                     | 1,052                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| BUREAU OF MINES.....                        | 9,259     | 9,259                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 1,052     | -                          | 1,052                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| US FISH AND WILDLIFE SERVICE.....           | 7,530     | 7,530                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEPARTMENT OF STATE, TOTAL.....             | 846       | -                          | -                                           | -                                              | 386                                  | -                                           | 100                                          | -                                                         | -     | 360                            |         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 846       | -                          | -                                           | -                                              | 386                                  | -                                           | 100                                          | -                                                         | -     | 360                            |         |
| DEPT OF TRANSPORTATION, TOTAL.....          | 29,600    | 17,360                     | 12,240                                      | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| FEDERAL AVIATION ADMINISTRATION.....        | 9,600     | 9,600                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 400       | 400                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| FEDERAL RAILROAD ADMINISTRATION.....        | 16,900    | 4,660                      | 12,240                                      | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 200       | 200                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| US COAST GUARD.....                         | 800       | 800                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,700     | 1,700                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 20        | 20                         | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| CUSTOMS SERVICE.....                        | 20        | 20                         | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| OTHER AGENCIES                              |           |                            |                                             |                                                |                                      |                                             |                                              |                                                           |       |                                |         |
| CONSUMER PRODUCT SAFETY COMMISSION.....     | 350       | 350                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 3,331     | 3,331                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 162,340   | 155,365                    | -                                           | -                                              | -                                    | 6,975                                       | -                                            | -                                                         | -     | -                              |         |
| NATIONAL SCIENCE FOUNDATION.....            | 36,600    | 1,500                      | 5,100                                       | -                                              | 10,200                               | 19,800                                      | -                                            | -                                                         | -     | -                              |         |
| NUCLEAR REGULATORY COMMISSION.....          | 7,890     | -                          | -                                           | 6,540                                          | -                                    | 964                                         | 243                                          | 143                                                       | -     | -                              |         |
| SMITHSONIAN INSTITUTION.....                | 737       | 737                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| TENNESSEE VALLEY AUTHORITY.....             | 30,400    | 30,400                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |
| VETERANS ADMINISTRATION.....                | 7,104     | 7,104                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -     | -                              |         |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-73. FEDERAL OBLIGATIONS FOR R&D PLANT, BY AGENCY AND PERFORMER OF THE RESEARCH AND DEVELOPMENT THE PLANT SUPPORTS:  
FISCAL YEAR 1979 (ESTIMATED)  
(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | FEDERAL<br>INTRA-<br>MURAL | EXTRAMURAL<br>UNITED STATES AND TERRITORIES |                                                |                                      |                                             |                                              |                                                           |                                |         |
|---------------------------------------------|-----------|----------------------------|---------------------------------------------|------------------------------------------------|--------------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|---------|
|                                             |           |                            | INDUS-<br>TRIAL<br>FIRMS                    | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES<br>AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTI-<br>TUTIONS | STATE<br>AND<br>LOCAL<br>GOVTS | FOREIGN |
| TOTAL, ALL AGENCIES.....                    | 1,347,834 | 457,178                    | 231,415                                     | 181,483                                        | 60,493                               | 391,762                                     | 6,887                                        | 7,093                                                     | 943                            | 600     |
| DEPARTMENTS                                 |           |                            |                                             |                                                |                                      |                                             |                                              |                                                           |                                |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 15,216    | 15,216                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 15,216    | 15,216                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| FEDERAL RESEARCH.....                       | 15,216    | 15,216                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF COMMERCE, TOTAL.....          | 4,200     | 600                        | 3,600                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| MARITIME ADMINISTRATION.....                | 4,000     | 400                        | 3,600                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| NATIONAL BUREAU OF STANDARDS.....           | 200       | 200                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 214,400   | 192,060                    | 19,531                                      | -                                              | 2,097                                | 80                                          | 632                                          | -                                                         | -                              | -       |
| DEPARTMENT OF THE ARMY.....                 | 37,900    | 37,900                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF THE NAVY.....                 | 94,900    | 94,900                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF THE AIR FORCE.....            | 45,000    | 45,000                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEFENSE AGENCIES.....                       | 36,600    | 14,260                     | 19,531                                      | -                                              | 2,097                                | 80                                          | 632                                          | -                                                         | -                              | -       |
| DEPARTMENT OF ENERGY.....                   | 790,694   | 15,108                     | 192,153                                     | 174,253                                        | 29,677                               | 365,772                                     | 5,755                                        | 7,033                                                     | 943                            | -       |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 52,313    | 43,313                     | -                                           | -                                              | 8,500                                | -                                           | 500                                          | -                                                         | -                              | -       |
| FOOD AND DRUG ADMINISTRATION.....           | 1,245     | 1,245                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| NATIONAL INSTITUTES OF HEALTH.....          | 51,068    | 42,068                     | -                                           | -                                              | 8,500                                | -                                           | 500                                          | -                                                         | -                              | -       |
| DEPARTMENT OF THE INTERIOR, TOTAL.....      | 2,941     | 1,700                      | 1,241                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| OFFICE OF WATER RES AND TECHNOLOGY.....     | 1,241     | -                          | 1,241                                       | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| US FISH AND WILDLIFE SERVICE.....           | 1,700     | 1,700                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF STATE, TOTAL.....             | 5,819     | -                          | -                                           | -                                              | 5,219                                | -                                           | -                                            | -                                                         | -                              | 600     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....   | 5,819     | -                          | -                                           | -                                              | 5,219                                | -                                           | -                                            | -                                                         | -                              | 600     |
| DEPT OF TRANSPORTATION, TOTAL.....          | 20,600    | 9,710                      | 10,890                                      | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| FEDERAL AVIATION ADMINISTRATION.....        | 600       | 600                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| FEDERAL HIGHWAY ADMINISTRATION.....         | 1,300     | 1,300                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| FEDERAL RAILROAD ADMINISTRATION.....        | 16,000    | 5,110                      | 10,890                                      | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN.....     | 200       | 200                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| US COAST GUARD.....                         | 800       | 800                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| URBAN MASS TRANSPORTATION ADMIN.....        | 1,700     | 1,700                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| DEPARTMENT OF THE TREASURY, TOTAL.....      | 50        | 50                         | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| CUSTOMS SERVICE.....                        | 50        | 50                         | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| OTHER AGENCIES                              |           |                            |                                             |                                                |                                      |                                             |                                              |                                                           |                                |         |
| ENVIRONMENTAL PROTECTION AGENCY.....        | 2,563     | 2,563                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 152,500   | 146,140                    | -                                           | -                                              | -                                    | 6,360                                       | -                                            | -                                                         | -                              | -       |
| NATIONAL SCIENCE FOUNDATION.....            | 38,900    | 1,500                      | 4,000                                       | -                                              | 15,000                               | 18,400                                      | -                                            | -                                                         | -                              | -       |
| NUCLEAR REGULATORY COMMISSION.....          | 8,000     | -                          | -                                           | 7,230                                          | -                                    | 1,150                                       | -                                            | 60                                                        | -                              | -       |
| SMITHSONIAN INSTITUTION.....                | 600       | 600                        | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| TENNESSEE VALLEY AUTHORITY.....             | 32,400    | 32,400                     | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |
| VETERANS ADMINISTRATION.....                | 6,218     | 6,218                      | -                                           | -                                              | -                                    | -                                           | -                                            | -                                                         | -                              | -       |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-74. FEDERAL OBLIGATIONS FOR RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES, BY DETAILED FIELD OF SCIENCE: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| FIELD OF SCIENCE                            | ACTUAL, 1977 | ESTIMATES |           |
|---------------------------------------------|--------------|-----------|-----------|
|                                             |              | 1978      | 1979      |
| TOTAL, ALL FIELDS.....                      | 2,482,189    | 2,819,293 | 3,065,504 |
| LIFE SCIENCES, TOTAL.....                   | 1,405,233    | 1,607,976 | 1,719,320 |
| BIOLOGICAL.....                             | 658,264      | 756,592   | 842,588   |
| CLINICAL MEDICAL.....                       | 492,866      | 561,953   | 569,068   |
| OTHER MEDICAL SCIENCES.....                 | 199,836      | 228,160   | 241,809   |
| LIFE SCIENCES, NEC.....                     | 54,267       | 61,271    | 65,855    |
| PSYCHOLOGY, TOTAL.....                      | 59,615       | 68,929    | 82,549    |
| BIOLOGICAL ASPECTS.....                     | 23,032       | 26,001    | 32,164    |
| SOCIAL ASPECTS.....                         | 21,381       | 24,749    | 31,603    |
| PSYCHOLOGICAL SCIENCES, NEC.....            | 15,202       | 18,179    | 18,782    |
| PHYSICAL SCIENCES, TOTAL.....               | 323,792      | 368,033   | 400,783   |
| ASTRONOMY.....                              | 34,511       | 39,529    | 40,543    |
| CHEMISTRY.....                              | 117,101      | 133,901   | 149,780   |
| PHYSICS.....                                | 163,542      | 184,578   | 202,944   |
| PHYSICAL SCIENCES, NEC.....                 | 8,638        | 10,025    | 7,514     |
| ENVIRONMENTAL SCIENCES, TOTAL.....          | 205,664      | 231,472   | 255,951   |
| ATMOSPHERIC SCIENCES.....                   | 51,483       | 56,386    | 60,939    |
| GEOLOGICAL SCIENCES.....                    | 55,269       | 63,420    | 72,973    |
| OCEANOGRAPHY.....                           | 82,491       | 94,978    | 103,182   |
| ENVIRONMENTAL SCIENCES, NEC.....            | 16,421       | 16,688    | 18,857    |
| MATHEMATICS & COMPUTER SCIENCES, TOTAL..... | 69,826       | 80,256    | 88,924    |
| MATHEMATICS.....                            | 36,997       | 41,494    | 47,452    |
| COMPUTER SCIENCES.....                      | 32,712       | 37,034    | 38,420    |
| MATHEMATICS & COMPUTER SCIENCES, NEC.....   | 117          | 1,728     | 3,052     |
| ENGINEERING, TOTAL.....                     | 249,268      | 271,371   | 305,201   |
| AERONAUTICAL.....                           | 39,745       | 42,677    | 47,042    |
| ASTRONAUTICAL.....                          | 7,772        | 8,300     | 9,295     |
| CHEMICAL.....                               | 17,505       | 19,454    | 23,797    |
| CIVIL.....                                  | 7,616        | 8,429     | 9,408     |
| ELECTRICAL.....                             | 46,228       | 49,231    | 54,164    |
| MECHANICAL.....                             | 16,939       | 19,612    | 25,500    |
| METALLURGY & MATERIALS.....                 | 48,048       | 54,101    | 57,695    |
| ENGINEERING, NEC.....                       | 65,415       | 69,567    | 76,300    |
| SOCIAL SCIENCES, TOTAL.....                 | 133,912      | 150,021   | 156,940   |
| ANTHROPOLOGY.....                           | 4,931        | 6,275     | 6,754     |
| ECONOMICS.....                              | 37,771       | 42,857    | 41,855    |
| POLITICAL SCIENCE.....                      | 2,787        | 3,644     | 4,373     |
| SOCIOLOGY.....                              | 18,905       | 20,107    | 23,782    |
| SOCIAL SCIENCES, NEC.....                   | 69,518       | 77,136    | 80,176    |
| OTHER SCIENCES, NEC.....                    | 34,879       | 41,235    | 55,836    |

NOTE: THE RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 95 PERCENT OF TOTAL FEDERAL RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977, 1978, AND 1979.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-75. FEDERAL OBLIGATIONS FOR RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | TOTAL     | LIFE SCIENCES | PSYCHOLOGY | PHYSICAL SCIENCES | ENVIRONMENTAL SCIENCES | MATHEMATICS AND COMPUTER SCIENCES | ENGINEERING | SOCIAL SCIENCES | OTHER SCIENCES NEC |
|-----------------------------------------|-----------|---------------|------------|-------------------|------------------------|-----------------------------------|-------------|-----------------|--------------------|
| TOTAL, ALL AGENCIES.....                | 2,482,189 | 1,405,233     | 59,615     | 323,792           | 205,664                | 69,826                            | 249,268     | 133,912         | 34,879             |
| DEPARTMENTS                             |           |               |            |                   |                        |                                   |             |                 |                    |
| DEPARTMENT OF AGRICULTURE, TOTAL.....   | 138,935   | 98,017        | -          | 7,157             | 787                    | 154                               | 4,596       | 28,224          | -                  |
| ECON. STAT & COOPERATIVES SERVICE....   | 764       | -             | -          | -                 | -                      | 104                               | -           | 660             | -                  |
| FOREST SERVICE.....                     | 8,920     | 6,752         | -          | -                 | 16                     | -                                 | -           | 152             | -                  |
| SCIENCE AND EDUCATION ADMINISTRATION    | 131,251   | 91,265        | -          | 7,157             | 771                    | 50                                | 4,596       | 27,412          | -                  |
| COOPERATIVE RESEARCH.....               | 122,728   | 84,269        | -          | 6,102             | 771                    | -                                 | 4,185       | 27,401          | -                  |
| FEDERAL RESEARCH.....                   | 8,523     | 6,996         | -          | 1,055             | -                      | 50                                | 411         | 11              | -                  |
| DEPARTMENT OF DEFENSE, TOTAL.....       | 242,971   | 20,722        | 8,761      | 32,210            | 38,055                 | 26,701                            | 115,775     | 636             | 111                |
| DEPARTMENT OF THE ARMY.....             | 36,096    | 10,776        | 1,667      | 6,102             | 1,354                  | 3,561                             | 12,682      | 127             | 27                 |
| DEPARTMENT OF THE NAVY.....             | 63,458    | 5,759         | 2,411      | 9,838             | 28,797                 | 6,737                             | 9,916       | -               | -                  |
| DEPARTMENT OF THE AIR FORCE.....        | 98,148    | 4,187         | 2,709      | 10,918            | 4,945                  | 3,878                             | 71,519      | -               | -                  |
| DEFENSE AGENCIES.....                   | 65,129    | -             | 2,059      | 5,352             | 2,959                  | 12,533                            | 21,658      | 484             | 84                 |
| DEPARTMENTWIDE FUNDS.....               | 140       | -             | 115        | -                 | -                      | -                                 | -           | 25              | -                  |
| DEPARTMENT OF ENERGY.....               | 133,930   | 25,519        | -          | 70,978            | 18,410                 | 2,610                             | 15,832      | 331             | 250                |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL  | 1,356,624 | 1,165,607     | 40,468     | 31,713            | -                      | 3,766                             | 23,534      | 66,774          | 24,762             |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.    | 87,743    | 43,410        | 26,755     | 47                | -                      | 1,227                             | -           | 15,315          | 989                |
| CENTER FOR DISEASE CONTROL.....         | 5,358     | 5,358         | -          | -                 | -                      | -                                 | -           | -               | -                  |
| FOOD AND DRUG ADMINISTRATION.....       | 8,425     | 8,425         | -          | -                 | -                      | -                                 | -           | -               | -                  |
| HEALTH CARE FINANCING ADMINISTRATION    | 1,727     | -             | -          | -                 | -                      | -                                 | -           | 1,727           | -                  |
| HEALTH RESOURCES ADMINISTRATION.....    | 7,114     | -             | -          | -                 | -                      | -                                 | -           | 7,114           | -                  |
| HEALTH SERVICES ADMINISTRATION.....     | 3,192     | 3,192         | -          | -                 | -                      | -                                 | -           | -               | -                  |
| HUMAN DEVELOPMENT SERVICES.....         | 25,328    | 13,012        | 660        | -                 | -                      | 173                               | 3,442       | 8,041           | -                  |
| NATIONAL INSTITUTE OF EDUCATION.....    | 10,525    | -             | -          | -                 | -                      | -                                 | -           | 10,525          | -                  |
| NATIONAL INSTITUTES OF HEALTH.....      | 1,187,571 | 1,092,210     | 13,053     | 31,666            | -                      | 2,366                             | 20,092      | 4,411           | 23,773             |
| OFFICE OF EDUCATION.....                | 5,749     | -             | -          | -                 | -                      | -                                 | -           | 5,749           | -                  |
| OFFICE OF ASST SECY FOR HEALTH.....     | 10,767    | -             | -          | -                 | -                      | -                                 | -           | 10,767          | -                  |
| OFFICE OF THE SECRETARY.....            | 2,567     | -             | -          | -                 | -                      | -                                 | -           | 2,567           | -                  |
| SOCIAL SECURITY ADMINISTRATION.....     | 558       | -             | -          | -                 | -                      | -                                 | -           | 558             | -                  |
| OTHER AGENCIES                          |           |               |            |                   |                        |                                   |             |                 |                    |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 135,059   | 7,866         | 829        | 40,029            | 32,938                 | 1,469                             | 18,804      | 158             | 2,966              |
| NATIONAL SCIENCE FOUNDATION.....        | 504,670   | 87,502        | 9,557      | 141,705           | 115,474                | 35,126                            | 70,727      | 37,789          | 6,790              |

NOTE: THE RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 95 PERCENT OF TOTAL FEDERAL RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-76. FEDERAL OBLIGATIONS FOR RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                     |                |                             | PHYSICAL SCIENCES |           |           |         |                       |
|---------------------------------------------|------------|---------------------|----------------|-----------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                             | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 59,615     | 23,032              | 21,381         | 15,202                      | 323,792           | 34,511    | 117,101   | 163,542 | 8,638                 |
| DEPARTMENTS                                 |            |                     |                |                             |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | -          | -                   | -              | -                           | 7,157             | -         | 7,078     | 79      | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                   | -              | -                           | 7,157             | -         | 7,078     | 79      | -                     |
| COOPERATIVE RESEARCH.....                   | -          | -                   | -              | -                           | 6,102             | -         | 6,102     | -       | -                     |
| FEDERAL RESEARCH.....                       | -          | -                   | -              | -                           | 1,055             | -         | 976       | 79      | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 8,761      | 716                 | 6,922          | 1,123                       | 32,210            | 2,071     | 9,963     | 16,984  | 3,192                 |
| DEPARTMENT OF THE ARMY.....                 | 1,467      | 53                  | 1,414          | -                           | 6,102             | -         | 3,523     | 2,574   | 5                     |
| DEPARTMENT OF THE NAVY.....                 | 2,411      | -                   | 2,411          | -                           | 9,838             | 744       | 2,027     | 7,067   | -                     |
| DEPARTMENT OF THE AIR FORCE.....            | 2,709      | 58                  | 2,651          | -                           | 10,918            | 1,327     | 4,280     | 4,413   | 898                   |
| DEFENSE AGENCIES.....                       | 2,059      | 605                 | 331            | 1,123                       | 5,352             | -         | 133       | 2,930   | 2,289                 |
| DEPARTMENTWIDE FUNDS.....                   | 115        | -                   | 115            | -                           | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF ENERGY.....                   | -          | -                   | -              | -                           | 70,978            | -         | 14,350    | 56,628  | -                     |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 40,468     | 15,200              | 11,830         | 13,438                      | 31,713            | -         | 30,829    | 884     | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 26,755     | 15,200              | 11,555         | -                           | 47                | -         | 47        | -       | -                     |
| HUMAN DEVELOPMENT SERVICES.....             | 480        | -                   | 275            | 389                         | -                 | -         | -         | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 13,053     | -                   | -              | 13,053                      | 31,666            | -         | 30,782    | 884     | -                     |
| OTHER AGENCIES                              |            |                     |                |                             |                   |           |           |         |                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 829        | 80                  | 108            | 641                         | 40,029            | 17,987    | 4,399     | 12,230  | 5,413                 |
| NATIONAL SCIENCE FOUNDATION.....            | 9,557      | 7,036               | 2,521          | -                           | 141,705           | 14,453    | 50,482    | 76,737  | 33                    |

NOTE: THE RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 95 PERCENT OF TOTAL FEDERAL RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-77. FEDERAL OBLIGATIONS FOR RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |             |                  |                            |                   | ENVIRONMENTAL SCIENCES |              |             |              |                            |
|---------------------------------------------|---------------|-------------|------------------|----------------------------|-------------------|------------------------|--------------|-------------|--------------|----------------------------|
|                                             | TOTAL         | BIO-LOGICAL | CLINICAL MEDICAL | OTHER MEDICAL SCIENCES NEC | LIFE SCIENCES NEC | TOTAL                  | ATMOS-PHERIC | GEO-LOGICAL | OCEANOGRAPHY | ENVIRONMENTAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 1,405,233     | 658,264     | 492,866          | 199,836                    | 54,267            | 205,664                | 51,483       | 55,269      | 82,491       | 16,421                     |
| DEPARTMENTS                                 |               |             |                  |                            |                   |                        |              |             |              |                            |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 98,017        | 92,440      | 5,577            | -                          | -                 | 787                    | 787          | -           | -            | -                          |
| FOREST SERVICE.....                         | 6,752         | 6,752       | -                | -                          | -                 | 16                     | 16           | -           | -            | -                          |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 91,265        | 85,688      | 5,577            | -                          | -                 | 771                    | 771          | -           | -            | -                          |
| COOPERATIVE RESEARCH.....                   | 84,269        | 78,692      | 5,577            | -                          | -                 | 771                    | 771          | -           | -            | -                          |
| FEDERAL RESEARCH.....                       | 8,996         | 6,996       | -                | -                          | -                 | -                      | -            | -           | -            | -                          |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 20,722        | 5,320       | 10,991           | 4,411                      | -                 | 38,055                 | 5,662        | 5,422       | 22,905       | 4,066                      |
| DEPARTMENT OF THE ARMY.....                 | 10,776        | 1,189       | 8,537            | 1,050                      | -                 | 1,354                  | 775          | 511         | -            | 68                         |
| DEPARTMENT OF THE NAVY.....                 | 5,759         | 3,577       | 2,182            | -                          | -                 | 28,797                 | 432          | 1,860       | 22,993       | 3,712                      |
| DEPARTMENT OF THE AIR FORCE.....            | 4,187         | 554         | 272              | 3,361                      | -                 | 4,945                  | 4,110        | 549         | -            | 286                        |
| DEFENSE AGENCIES.....                       | -             | -           | -                | -                          | -                 | 2,959                  | 145          | 2,502       | 312          | -                          |
| DEPARTMENT OF ENERGY.....                   | 25,519        | 21,952      | 674              | 508                        | 2,385             | 18,410                 | 1,799        | 6,595       | 6,026        | 3,990                      |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 1,165,607     | 448,154     | 474,374          | 192,767                    | 50,312            | -                      | -            | -           | -            | -                          |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 43,410        | 29,504      | 3,638            | 1,877                      | 8,391             | -                      | -            | -           | -            | -                          |
| CENTER FOR DISEASE CONTROL.....             | 5,358         | -           | -                | 5,358                      | -                 | -                      | -            | -           | -            | -                          |
| FOOD AND DRUG ADMINISTRATION.....           | 8,425         | 6,974       | -                | 1,451                      | -                 | -                      | -            | -           | -            | -                          |
| HEALTH SERVICES ADMINISTRATION.....         | 3,192         | -           | -                | 3,192                      | -                 | -                      | -            | -           | -            | -                          |
| HUMAN DEVELOPMENT SERVICES.....             | 13,012        | -           | 12,785           | 84                         | 143               | -                      | -            | -           | -            | -                          |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,092,210     | 411,676     | 457,951          | 180,805                    | 41,778            | -                      | -            | -           | -            | -                          |
| OTHER AGENCIES                              |               |             |                  |                            |                   |                        |              |             |              |                            |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 7,866         | 3,089       | 1,250            | 1,957                      | 1,570             | 32,938                 | 16,428       | 7,817       | 338          | 8,355                      |
| NATIONAL SCIENCE FOUNDATION.....            | 87,502        | 87,309      | -                | 193                        | -                 | 115,474                | 26,807       | 35,435      | 53,222       | 10                         |

NOTE: THE RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 95 PERCENT OF TOTAL FEDERAL RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-70. FEDERAL OBLIGATIONS FOR RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |       |                 |                 |                                  |                         |
|---------------------------------------------|-------------|-------------------|--------------------|----------|-------|-----------------|-----------------|----------------------------------|-------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 249,268     | 39,745            | 7,772              | 17,505   | 7,616 | 46,228          | 16,939          | 48,048                           | 65,415                  |
| DEPARTMENTS                                 |             |                   |                    |          |       |                 |                 |                                  |                         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 4,596       | -                 | -                  | -        | 12    | 40              | -               | -                                | 4,544                   |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 4,596       | -                 | -                  | -        | 12    | 40              | -               | -                                | 4,544                   |
| COOPERATIVE RESEARCH.....                   | 4,185       | -                 | -                  | -        | -     | -               | -               | -                                | 4,185                   |
| FEDERAL RESEARCH.....                       | 411         | -                 | -                  | -        | 12    | 40              | -               | -                                | 359                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 115,775     | 31,531            | 7,080              | 4,217    | 963   | 24,448          | 8,435           | 18,324                           | 20,777                  |
| DEPARTMENT OF THE ARMY.....                 | 12,682      | 1,077             | -                  | 235      | 297   | 6,722           | 1,843           | 2,362                            | 146                     |
| DEPARTMENT OF THE NAVY.....                 | 9,916       | 709               | -                  | 2,668    | -     | 2,178           | 2,521           | 1,840                            | -                       |
| DEPARTMENT OF THE AIR FORCE.....            | 71,519      | 29,740            | 7,080              | 1,314    | 540   | 7,445           | 4,031           | 9,320                            | 12,049                  |
| DEFENSE AGENCIES.....                       | 21,658      | 5                 | -                  | -        | 126   | 8,103           | 40              | 4,802                            | 8,582                   |
| DEPARTMENT OF ENERGY.....                   | 15,832      | -                 | -                  | 4,219    | -     | 98              | 695             | 9,489                            | 1,331                   |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 23,534      | -                 | -                  | -        | -     | -               | -               | -                                | 23,534                  |
| HUMAN DEVELOPMENT SERVICES.....             | 3,442       | -                 | -                  | -        | -     | -               | -               | -                                | 3,442                   |
| NATIONAL INSTITUTES OF HEALTH.....          | 20,092      | -                 | -                  | -        | -     | -               | -               | -                                | 20,092                  |
| OTHER AGENCIES                              |             |                   |                    |          |       |                 |                 |                                  |                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 18,804      | 7,564             | 692                | 370      | 124   | 3,301           | 1,128           | 3,293                            | 2,332                   |
| NATIONAL SCIENCE FOUNDATION.....            | 70,727      | 650               | -                  | 8,699    | 6,517 | 18,341          | 6,681           | 16,942                           | 12,897                  |

NOTE: THE RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 95 PERCENT OF TOTAL FEDERAL RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-79. FEDERAL OBLIGATIONS FOR RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|-----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                         | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                | 69,826                            | 36,997           | 32,712               | 117                                                      | 133,912         | 4,931             | 37,771         | 2,787                     | 18,905         | 69,510                    |
| DEPARTMENTS                             |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....   | 154                               | 154              | -                    | -                                                        | 28,224          | -                 | 26,736         | -                         | 1,475          | 13                        |
| ECON, STAT & COOPERATIVES SERVICE....   | 104                               | 104              | -                    | -                                                        | 660             | -                 | 623            | -                         | 24             | 13                        |
| FOREST SERVICE.....                     | -                                 | -                | -                    | -                                                        | 152             | -                 | 152            | -                         | -              | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION    | 50                                | 50               | -                    | -                                                        | 27,412          | -                 | 25,961         | -                         | 1,451          | -                         |
| COOPERATIVE RESEARCH.....               | -                                 | -                | -                    | -                                                        | 27,401          | -                 | 25,950         | -                         | 1,451          | -                         |
| FEDERAL RESEARCH.....                   | 50                                | 50               | -                    | -                                                        | 11              | -                 | 11             | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....       | 26,701                            | 10,967           | 15,617               | 117                                                      | 636             | -                 | 25             | 494                       | 109            | -                         |
| DEPARTMENT OF THE ARMY.....             | 3,561                             | 3,199            | 362                  | -                                                        | 127             | -                 | 18             | -                         | 109            | -                         |
| DEPARTMENT OF THE NAVY.....             | 4,737                             | 4,576            | 2,161                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF THE AIR FORCE.....        | 3,870                             | 3,192            | 678                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                   | 12,533                            | -                | 12,416               | 117                                                      | 484             | -                 | 15             | 469                       | -              | -                         |
| DEPARTMENTWIDE FUNDS.....               | -                                 | -                | -                    | -                                                        | 25              | -                 | -              | 25                        | -              | -                         |
| DEPARTMENT OF ENERGY.....               | 2,610                             | 1,696            | 914                  | -                                                        | 331             | -                 | 331            | -                         | -              | -                         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL  | 3,766                             | 3,593            | 173                  | -                                                        | 66,774          | 1,627             | 2,492          | 198                       | 14,238         | 48,219                    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.    | 1,227                             | 1,227            | -                    | -                                                        | 15,315          | 1,627             | 184            | 178                       | 11,662         | 1,664                     |
| HEALTH CARE FINANCING ADMINISTRATION    | -                                 | -                | -                    | -                                                        | 1,727           | -                 | -              | -                         | -              | 1,727                     |
| HEALTH RESOURCES ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 7,114           | -                 | -              | -                         | -              | 7,114                     |
| HUMAN DEVELOPMENT SERVICES.....         | 173                               | -                | 173                  | -                                                        | 8,041           | -                 | 150            | -                         | 1,309          | 6,582                     |
| NATIONAL INSTITUTE OF EDUCATION.....    | -                                 | -                | -                    | -                                                        | 10,525          | -                 | -              | -                         | -              | 10,525                    |
| NATIONAL INSTITUTES OF HEALTH.....      | 2,366                             | 2,366            | -                    | -                                                        | 4,411           | -                 | -              | -                         | -              | 4,411                     |
| OFFICE OF EDUCATION.....                | -                                 | -                | -                    | -                                                        | 5,749           | -                 | -              | -                         | -              | 5,749                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....   | -                                 | -                | -                    | -                                                        | 10,767          | -                 | 429            | 20                        | 429            | 9,889                     |
| OFFICE OF THE SECRETARY.....            | -                                 | -                | -                    | -                                                        | 2,567           | -                 | 1,729          | -                         | 838            | -                         |
| SOCIAL SECURITY ADMINISTRATION.....     | -                                 | -                | -                    | -                                                        | 558             | -                 | -              | -                         | -              | 558                       |
| OTHER AGENCIES                          |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 1,469                             | 701              | 768                  | -                                                        | 158             | -                 | 82             | 30                        | -              | 46                        |
| NATIONAL SCIENCE FOUNDATION.....        | 35,126                            | 19,886           | 15,240               | -                                                        | 37,789          | 3,304             | 8,097          | 2,065                     | 3,083          | 21,240                    |

NOTE: THE RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 95 PERCENT OF TOTAL FEDERAL RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-80. FEDERAL OBLIGATIONS FOR BASIC RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES,  
BY DETAILED FIELD OF SCIENCE: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| FIELD OF SCIENCE                            | ACTUAL, 1977 | ESTIMATES |           |
|---------------------------------------------|--------------|-----------|-----------|
|                                             |              | 1978      | 1979      |
| TOTAL, ALL FIELDS.....                      | 1,291,878    | 1,479,588 | 1,664,291 |
| LIFE SCIENCES, TOTAL.....                   | 571,062      | 662,063   | 753,155   |
| BIOLOGICAL.....                             | 460,238      | 536,142   | 611,645   |
| CLINICAL MEDICAL.....                       | 10,981       | 11,990    | 12,891    |
| OTHER MEDICAL SCIENCES.....                 | 79,164       | 90,452    | 101,828   |
| LIFE SCIENCES, NEC.....                     | 20,679       | 23,479    | 26,791    |
| PSYCHOLOGY, TOTAL.....                      | 33,133       | 37,867    | 49,630    |
| BIOLOGICAL ASPECTS.....                     | 13,191       | 14,580    | 17,838    |
| SOCIAL ASPECTS.....                         | 11,110       | 12,727    | 16,210    |
| PSYCHOLOGICAL SCIENCES, NEC.....            | 8,832        | 10,560    | 11,582    |
| PHYSICAL SCIENCES, TOTAL.....               | 273,751      | 307,148   | 332,443   |
| ASTRONOMY.....                              | 31,867       | 36,877    | 37,884    |
| CHEMISTRY.....                              | 101,657      | 117,183   | 129,308   |
| PHYSICS.....                                | 135,701      | 147,882   | 159,887   |
| PHYSICAL SCIENCES, NEC.....                 | 4,526        | 5,206     | 5,364     |
| ENVIRONMENTAL SCIENCES, TOTAL.....          | 165,811      | 189,886   | 209,746   |
| ATMOSPHERIC SCIENCES.....                   | 40,156       | 46,391    | 50,393    |
| GEOLOGICAL SCIENCES.....                    | 45,053       | 53,380    | 61,780    |
| OCEANOGRAPHY.....                           | 72,649       | 81,676    | 88,844    |
| ENVIRONMENTAL SCIENCES, NEC.....            | 7,763        | 8,439     | 8,729     |
| MATHEMATICS & COMPUTER SCIENCES, TOTAL..... | 55,679       | 63,149    | 72,362    |
| MATHEMATICS.....                            | 34,043       | 37,482    | 43,055    |
| COMPUTER SCIENCES.....                      | 21,606       | 24,756    | 27,727    |
| MATHEMATICS & COMPUTER SCIENCES, NEC.....   | 30           | 911       | 1,580     |
| ENGINEERING, TOTAL.....                     | 134,128      | 151,684   | 167,372   |
| AERONAUTICAL.....                           | 12,328       | 14,233    | 15,445    |
| ASTRONAUTICAL.....                          | 1,713        | 1,907     | 2,117     |
| CHEMICAL.....                               | 9,540        | 10,210    | 11,701    |
| CIVIL.....                                  | 5,992        | 6,612     | 7,245     |
| ELECTRICAL.....                             | 34,317       | 37,361    | 40,174    |
| MECHANICAL.....                             | 13,156       | 14,864    | 16,870    |
| METALLURGY & MATERIALS.....                 | 41,207       | 46,240    | 48,919    |
| ENGINEERING, NEC.....                       | 15,875       | 20,257    | 26,885    |
| SOCIAL SCIENCES, TOTAL.....                 | 51,982       | 58,904    | 69,986    |
| ANTHROPOLOGY.....                           | 3,535        | 4,350     | 5,113     |
| ECONOMICS.....                              | 19,053       | 21,486    | 22,192    |
| POLITICAL SCIENCE.....                      | 2,026        | 2,481     | 3,196     |
| SOCIOLOGY.....                              | 7,781        | 8,552     | 10,259    |
| SOCIAL SCIENCES, NEC.....                   | 19,587       | 22,035    | 29,226    |
| OTHER SCIENCES, NEC.....                    | 6,502        | 8,887     | 13,597    |

NOTE: THE BASIC RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS  
TABLE REPRESENT APPROXIMATELY 98 PERCENT OF TOTAL FEDERAL BASIC RESEARCH  
OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977, 1978, AND 1979.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-81. FEDERAL OBLIGATIONS FOR BASIC RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL     | LIFE SCIENCES | PSYCHOLOGY | PHYSICAL SCIENCES | ENVIRONMENTAL SCIENCES | MATHEMATICS AND COMPUTER SCIENCES | ENGINEERING | SOCIAL SCIENCES | OTHER SCIENCES NEC |
|---------------------------------------------|-----------|---------------|------------|-------------------|------------------------|-----------------------------------|-------------|-----------------|--------------------|
| TOTAL, ALL AGENCIES.....                    | 1,291,878 | 571,062       | 33,133     | 273,751           | 165,641                | 55,679                            | 134,128     | 51,982          | 6,502              |
| DEPARTMENTS                                 |           |               |            |                   |                        |                                   |             |                 |                    |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 56,130    | 40,729        | -          | 2,801             | 293                    | 24                                | 1,779       | 10,504          | -                  |
| ECON. SYST. & COOPERATIVES SERVICE.....     | 90        | -             | -          | -                 | -                      | -                                 | -           | 90              | -                  |
| FOREST SERVICE.....                         | 5,501     | 5,501         | -          | -                 | -                      | -                                 | -           | -               | -                  |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 50,539    | 35,228        | -          | 2,801             | 293                    | 24                                | 1,779       | 10,414          | -                  |
| COOPERATIVE RESEARCH.....                   | 46,637    | 32,023        | -          | 2,319             | 293                    | -                                 | 1,590       | 10,412          | -                  |
| FEDERAL RESEARCH.....                       | 3,902     | 3,205         | -          | 482               | -                      | 24                                | 189         | 2               | -                  |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 130,905   | 11,029        | 5,865      | 23,047            | 29,690                 | 16,175                            | 45,033      | 66              | -                  |
| DEPARTMENT OF THE ARMY.....                 | 22,194    | 3,710         | 975        | 4,408             | 1,284                  | 3,013                             | 8,738       | 66              | -                  |
| DEPARTMENT OF THE NAVY.....                 | 53,578    | 5,566         | 2,144      | 8,129             | 25,256                 | 6,006                             | 4,477       | -               | -                  |
| DEPARTMENT OF THE AIR FORCE.....            | 40,950    | 1,753         | 1,538      | 10,177            | 2,990                  | 3,828                             | 20,444      | -               | -                  |
| DEFENSE AGENCIES.....                       | 14,183    | -             | 1,208      | 333               | 160                    | 3,328                             | 9,154       | -               | -                  |
| DEPARTMENT OF ENERGY.....                   | 71,103    | 7,665         | -          | 50,604            | 846                    | 2,610                             | 9,378       | -               | -                  |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 486,860   | 421,972       | 17,143     | 26,126            | -                      | 1,826                             | 4,695       | 13,228          | 1,875              |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 31,914    | 17,255        | 9,337      | 16                | -                      | 429                               | -           | 4,695           | 428                |
| HUMAN DEVELOPMENT SERVICES.....             | 2,068     | 2,068         | -          | -                 | -                      | -                                 | -           | -               | -                  |
| NATIONAL INSTITUTE OF EDUCATION.....        | 4,685     | -             | -          | -                 | -                      | -                                 | -           | 4,685           | -                  |
| NATIONAL INSTITUTES OF HEALTH.....          | 446,608   | 402,649       | 7,806      | 26,110            | -                      | 1,397                             | 4,695       | 504             | 1,447              |
| OFFICE OF ASST SECY FOR HEALTH.....         | 1,190     | -             | -          | -                 | -                      | -                                 | -           | 1,190           | -                  |
| OFFICE OF THE SECRETARY.....                | 2,395     | -             | -          | -                 | -                      | -                                 | -           | 2,395           | -                  |
| OTHER AGENCIES                              |           |               |            |                   |                        |                                   |             |                 |                    |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 71,988    | 4,554         | 568        | 32,568            | 21,511                 | 754                               | 10,430      | 82              | 1,321              |
| NATIONAL SCIENCE FOUNDATION.....            | 474,892   | 85,113        | 9,557      | 138,605           | 113,301                | 34,290                            | 62,613      | 28,107          | 3,306              |

NOTE: THE BASIC RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 98 PERCENT OF TOTAL FEDERAL BASIC RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-82. FEDERAL OBLIGATIONS FOR BASIC RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | TOTAL  | PSYCHOLOGY         |                |                           | TOTAL   | PHYSICAL SCIENCES |           |         | PHYSICAL SCIENCES NEC |
|---------------------------------------------|--------|--------------------|----------------|---------------------------|---------|-------------------|-----------|---------|-----------------------|
|                                             |        | BIOLOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHOLOGICAL ASPECTS NEC |         | ASTRONOMY         | CHEMISTRY | PHYSICS |                       |
| TOTAL, ALL AGENCIES.....                    | 33,133 | 13,191             | 11,110         | 8,832                     | 273,751 | 31,867            | 101,657   | 135,701 | 4,526                 |
| DEPARTMENTS                                 |        |                    |                |                           |         |                   |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | -      | -                  | -              | -                         | 2,801   | -                 | 2,766     | 35      | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -      | -                  | -              | -                         | 2,801   | -                 | 2,766     | 35      | -                     |
| COOPERATIVE RESEARCH.....                   | -      | -                  | -              | -                         | 2,319   | -                 | 2,319     | -       | -                     |
| FEDERAL RESEARCH.....                       | -      | -                  | -              | -                         | 482     | -                 | 447       | 35      | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 5,865  | 605                | 4,657          | 603                       | 23,047  | 2,022             | 8,333     | 11,694  | 998                   |
| DEPARTMENT OF THE ARMY.....                 | 975    | -                  | 975            | -                         | 4,408   | -                 | 2,193     | 2,215   | -                     |
| DEPARTMENT OF THE NAVY.....                 | 2,144  | -                  | 2,144          | -                         | 8,129   | 744               | 2,027     | 5,358   | -                     |
| DEPARTMENT OF THE AIR FORCE.....            | 1,538  | -                  | 1,538          | -                         | 10,177  | 1,278             | 4,018     | 5,983   | 898                   |
| DEFENSE AGENCIES.....                       | 1,208  | 605                | -              | 603                       | 333     | -                 | 95        | 138     | 100                   |
| DEPARTMENT OF ENERGY.....                   | -      | -                  | -              | -                         | 50,604  | -                 | 12,190    | 38,414  | -                     |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 17,143 | 5,495              | 3,842          | 7,806                     | 26,126  | -                 | 25,992    | 134     | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 9,337  | 5,495              | 3,842          | -                         | 16      | -                 | 16        | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 7,806  | -                  | -              | 7,806                     | 26,110  | -                 | 25,976    | 134     | -                     |
| OTHER AGENCIES                              |        |                    |                |                           |         |                   |           |         |                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 568    | 55                 | 90             | 423                       | 32,568  | 15,392            | 3,717     | 9,964   | 3,495                 |
| NATIONAL SCIENCE FOUNDATION.....            | 9,557  | 7,036              | 2,521          | -                         | 138,605 | 14,453            | 48,659    | 75,460  | 33                    |

NOTE: THE BASIC RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 98 PERCENT OF TOTAL FEDERAL BASIC RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.



TABLE C-84. FEDERAL OBLIGATIONS FOR BASIC RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |       |                 |                 |                                  |                         |
|---------------------------------------------|-------------|-------------------|--------------------|----------|-------|-----------------|-----------------|----------------------------------|-------------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGI-<br>NEERING<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 134,128     | 12,328            | 1,713              | 9,540    | 9,992 | 34,317          | 13,156          | 41,207                           | 19,879                  |
| DEPARTMENTS                                 |             |                   |                    |          |       |                 |                 |                                  |                         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 1,779       | -                 | -                  | -        | 7     | 19              | -               | -                                | 1,753                   |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 1,779       | -                 | -                  | -        | 7     | 19              | -               | -                                | 1,753                   |
| COOPERATIVE RESEARCH.....                   | 1,590       | -                 | -                  | -        | -     | -               | -               | -                                | 1,590                   |
| FEDERAL RESEARCH.....                       | 189         | -                 | -                  | -        | 7     | 19              | -               | -                                | 163                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 45,033      | 6,718             | 1,356              | 694      | 10    | 15,462          | 6,723           | 13,698                           | 372                     |
| DEPARTMENT OF THE ARMY.....                 | 8,738       | 598               | -                  | 22       | 10    | 4,674           | 1,418           | 2,016                            | -                       |
| DEPARTMENT OF THE NAVY.....                 | 6,477       | 630               | -                  | -        | -     | 1,654           | 2,521           | 1,672                            | -                       |
| DEPARTMENT OF THE AIR FORCE.....            | 20,664      | 5,490             | 1,356              | 672      | -     | 3,986           | 2,784           | 6,004                            | 372                     |
| DEFENSE AGENCIES.....                       | 9,154       | -                 | -                  | -        | -     | 3,148           | -               | 4,006                            | -                       |
| DEPARTMENT OF ENERGY.....                   | 9,378       | -                 | -                  | 397      | -     | -               | -               | 8,781                            | -                       |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 4,695       | -                 | -                  | -        | -     | -               | -               | -                                | 4,695                   |
| NATIONAL INSTITUTES OF HEALTH.....          | 4,695       | -                 | -                  | -        | -     | -               | -               | -                                | 4,695                   |
| OTHER AGENCIES                              |             |                   |                    |          |       |                 |                 |                                  |                         |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 10,630      | 5,050             | 357                | 90       | 48    | 1,034           | 365             | 2,577                            | 1,107                   |
| NATIONAL SCIENCE FOUNDATION.....            | 62,613      | 560               | -                  | 8,159    | 9,927 | 17,800          | 8,068           | 16,151                           | 7,948                   |

NOTE: THE BASIC RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 98 PERCENT OF TOTAL FEDERAL BASIC RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-83. FEDERAL OBLIGATIONS FOR BASIC RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |                 |                     |                              |                         | ENVIRONMENTAL SCIENCES |                  |                 |                   |                                       |
|---------------------------------------------|---------------|-----------------|---------------------|------------------------------|-------------------------|------------------------|------------------|-----------------|-------------------|---------------------------------------|
|                                             | TOTAL         | BIO-<br>LOGICAL | CLINICAL<br>MEDICAL | OTHER<br>MEDICAL<br>SCIENCES | LIFE<br>SCIENCES<br>NEC | TOTAL                  | ATMOS-<br>PHERIC | GEO-<br>LOGICAL | OCEAN-<br>OGRAPHY | ENVIRON-<br>MENTAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....                    | 571,062       | 460,238         | 10,981              | 79,164                       | 20,679                  | 165,641                | 40,156           | 45,053          | 72,669            | 7,763                                 |
| DEPARTMENTS                                 |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 40,729        | 38,610          | 2,119               | -                            | -                       | 293                    | 293              | -               | -                 | -                                     |
| FOREST SERVICE.....                         | 5,501         | 5,501           | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 33,228        | 33,109          | 2,119               | -                            | -                       | 293                    | 293              | -               | -                 | -                                     |
| COOPERATIVE RESEARCH.....                   | 32,023        | 29,904          | 2,119               | -                            | -                       | 293                    | 293              | -               | -                 | -                                     |
| FEDERAL RESEARCH.....                       | 3,205         | 3,205           | -                   | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 11,029        | 4,643           | 5,373               | 1,013                        | -                       | 29,690                 | 3,603            | 2,877           | 19,212            | 3,998                                 |
| DEPARTMENT OF THE ARMY.....                 | 3,710         | 652             | 2,992               | 66                           | -                       | 1,284                  | 775              | 509             | -                 | -                                     |
| DEPARTMENT OF THE NAVY.....                 | 5,566         | 3,457           | 2,109               | -                            | -                       | 25,256                 | 432              | 1,860           | 19,052            | 3,712                                 |
| DEPARTMENT OF THE AIR FORCE.....            | 1,753         | 534             | 272                 | 947                          | -                       | 2,990                  | 2,196            | 508             | -                 | 286                                   |
| DEFENSE AGENCIES.....                       | -             | -               | -                   | -                            | -                       | 160                    | -                | -               | 160               | -                                     |
| DEPARTMENT OF ENERGY.....                   | 7,665         | 7,665           | -                   | -                            | -                       | 846                    | -                | 846             | -                 | -                                     |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 421,972       | 321,938         | 3,221               | 76,975                       | 19,838                  | -                      | -                | -               | -                 | -                                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 17,255        | 12,055          | 1,153               | 926                          | 3,127                   | -                      | -                | -               | -                 | -                                     |
| HUMAN DEVELOPMENT SERVICES.....             | 2,068         | -               | 2,068               | -                            | -                       | -                      | -                | -               | -                 | -                                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 402,649       | 309,883         | -                   | 76,055                       | 16,711                  | -                      | -                | -               | -                 | -                                     |
| OTHER AGENCIES                              |               |                 |                     |                              |                         |                        |                  |                 |                   |                                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 4,554         | 2,462           | 268                 | 983                          | 841                     | 21,511                 | 10,818           | 6,703           | 235               | 3,755                                 |
| NATIONAL SCIENCE FOUNDATION.....            | 85,113        | 84,920          | -                   | 193                          | -                       | 113,301                | 25,442           | 34,627          | 53,222            | 10                                    |

NOTE: THE BASIC RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 98 PERCENT OF TOTAL FEDERAL BASIC RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-85. FEDERAL OBLIGATIONS FOR BASIC RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|---------------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                             | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEG | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEG |
| TOTAL, ALL AGENCIES.....                    | 55,679                            | 34,043           | 21,606               | 30                                                       | 51,982          | 3,535             | 19,053         | 2,026                     | 7,781          | 19,587                    |
| DEPARTMENTS                                 |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 24                                | 24               | -                    | -                                                        | 10,504          | -                 | 9,943          | -                         | 558            | 3                         |
| ECOM, STAT & COOPERATIVES SERVICE.....      | -                                 | -                | -                    | -                                                        | 90              | -                 | 80             | -                         | 7              | 3                         |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 24                                | 24               | -                    | -                                                        | 10,414          | -                 | 9,863          | -                         | 551            | -                         |
| COOPERATIVE RESEARCH.....                   | -                                 | -                | -                    | -                                                        | 10,412          | -                 | 9,861          | -                         | 551            | -                         |
| FEDERAL RESEARCH.....                       | 24                                | 24               | -                    | -                                                        | 2               | -                 | 2              | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 16,175                            | 10,298           | 5,847                | 30                                                       | 66              | -                 | -              | -                         | 66             | -                         |
| DEPARTMENT OF THE ARMY.....                 | 3,013                             | 3,013            | -                    | -                                                        | 66              | -                 | -              | -                         | 66             | -                         |
| DEPARTMENT OF THE NAVY.....                 | 6,006                             | 4,112            | 1,894                | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF THE AIR FORCE.....            | 3,828                             | 3,173            | 655                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                       | 3,326                             | -                | 3,298                | 30                                                       | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF ENERGY.....                   | 2,610                             | 1,696            | 914                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 1,826                             | 1,826            | -                    | -                                                        | 13,223          | 231               | 1,790          | 65                        | 4,230          | 6,907                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 429                               | 429              | -                    | -                                                        | 4,449           | 231               | 65             | 63                        | 3,464          | 626                       |
| NATIONAL INSTITUTE OF EDUCATION.....        | -                                 | -                | -                    | -                                                        | 4,685           | -                 | -              | -                         | -              | 4,685                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 1,397                             | 1,397            | -                    | -                                                        | 504             | -                 | -              | -                         | -              | 504                       |
| OFFICE OF ASS'T SECY FOR HEALTH.....        | -                                 | -                | -                    | -                                                        | 1,190           | -                 | 48             | 2                         | 48             | 1,092                     |
| OFFICE OF THE SECRETARY.....                | -                                 | -                | -                    | -                                                        | 2,395           | -                 | 1,677          | -                         | 718            | -                         |
| OTHER AGENCIES                              |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 754                               | 483              | 271                  | -                                                        | 82              | -                 | 82             | -                         | -              | -                         |
| NATIONAL SCIENCE FOUNDATION.....            | 34,290                            | 19,714           | 14,574               | -                                                        | 28,107          | 3,304             | 7,238          | 1,961                     | 2,927          | 12,677                    |

NOTE: THE BASIC RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 98 PERCENT OF TOTAL FEDERAL BASIC RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-86. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES, BY DETAILED FIELD OF SCIENCE: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| FIELD OF SCIENCE                            | ACTUAL, 1977 | ESTIMATES |           |
|---------------------------------------------|--------------|-----------|-----------|
|                                             |              | 1978      | 1979      |
| TOTAL, ALL FIELDS.....                      | 1,190,311    | 1,339,705 | 1,401,213 |
| LIFE SCIENCES, TOTAL.....                   | 834,171      | 945,913   | 966,165   |
| BIOLOGICAL.....                             | 198,026      | 220,450   | 230,943   |
| CLINICAL MEDICAL.....                       | 481,885      | 549,963   | 556,177   |
| OTHER MEDICAL SCIENCES.....                 | 120,472      | 137,708   | 139,941   |
| LIFE SCIENCES, NEC.....                     | 33,588       | 37,792    | 39,064    |
| PSYCHOLOGY, TOTAL.....                      | 26,482       | 31,062    | 36,919    |
| BIOLOGICAL ASPECTS.....                     | 9,861        | 11,421    | 14,326    |
| SOCIAL ASPECTS.....                         | 10,271       | 12,022    | 15,393    |
| PSYCHOLOGICAL SCIENCES, NEC.....            | 6,370        | 7,619     | 7,200     |
| PHYSICAL SCIENCES, TOTAL.....               | 50,041       | 60,885    | 68,340    |
| ASTRONOMY.....                              | 2,644        | 2,652     | 2,659     |
| CHEMISTRY.....                              | 15,444       | 16,710    | 20,472    |
| PHYSICS.....                                | 27,841       | 36,696    | 43,039    |
| PHYSICAL SCIENCES, NEC.....                 | 4,112        | 4,819     | 2,150     |
| ENVIRONMENTAL SCIENCES, TOTAL.....          | 40,023       | 41,586    | 46,205    |
| ATMOSPHERIC SCIENCES.....                   | 11,327       | 9,995     | 10,546    |
| GEOLOGICAL SCIENCES.....                    | 10,216       | 10,040    | 11,193    |
| OCEANOGRAPHY.....                           | 9,822        | 13,302    | 14,538    |
| ENVIRONMENTAL SCIENCES, NEC.....            | 8,658        | 8,249     | 10,128    |
| MATHEMATICS & COMPUTER SCIENCES, TOTAL..... | 14,147       | 17,107    | 16,562    |
| MATHEMATICS.....                            | 2,954        | 4,012     | 4,397     |
| COMPUTER SCIENCES.....                      | 11,106       | 12,278    | 10,693    |
| MATHEMATICS & COMPUTER SCIENCES, NEC.....   | 87           | 817       | 1,472     |
| ENGINEERING, TOTAL.....                     | 115,140      | 119,687   | 137,829   |
| AERONAUTICAL.....                           | 27,417       | 28,444    | 31,597    |
| ASTRONAUTICAL.....                          | 6,059        | 6,393     | 7,168     |
| CHEMICAL.....                               | 7,965        | 9,244     | 12,090    |
| CIVIL.....                                  | 1,624        | 1,817     | 2,163     |
| ELECTRICAL.....                             | 11,911       | 11,870    | 17,990    |
| MECHANICAL.....                             | 3,783        | 4,748     | 8,630     |
| METALLURGY & MATERIALS.....                 | 6,841        | 7,861     | 8,776     |
| ENGINEERING, NEC.....                       | 49,540       | 49,310    | 49,415    |
| SOCIAL SCIENCES, TOTAL.....                 | 81,930       | 91,117    | 86,954    |
| ANTHROPOLOGY.....                           | 1,396        | 1,925     | 1,641     |
| ECONOMICS.....                              | 18,718       | 21,371    | 19,643    |
| POLITICAL SCIENCE.....                      | 761          | 1,165     | 1,177     |
| SOCIOLOGY.....                              | 11,124       | 11,555    | 13,523    |
| SOCIAL SCIENCES, NEC.....                   | 49,931       | 55,101    | 50,950    |
| OTHER SCIENCES, NEC.....                    | 28,377       | 32,348    | 42,239    |

NOTE: THE APPLIED RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 92 PERCENT OF TOTAL FEDERAL APPLIED RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977, 1978, AND 1979.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-97. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES, BY AGENCY AND FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | TOTAL     | LIFE SCIENCES | PSY-<br>CHOLOGY | PHYSICAL SCIENCES | ENVIRON-<br>MENTAL SCIENCES | MATHE-<br>MATICS AND COM-<br>PUTER SCIENCES | ENGI-<br>NEERING | SOCIAL SCIENCES | OTHER SCIENCES<br>NEG |
|----------------------------------------|-----------|---------------|-----------------|-------------------|-----------------------------|---------------------------------------------|------------------|-----------------|-----------------------|
| TOTAL, ALL AGENCIES.....               | 1,190,311 | 834,171       | 26,482          | 50,041            | 40,023                      | 14,147                                      | 115,140          | 81,930          | 28,377                |
| DEPARTMENTS                            |           |               |                 |                   |                             |                                             |                  |                 |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 82,805    | 57,288        | -               | 4,356             | 494                         | 130                                         | 2,817            | 17,720          | -                     |
| ECON. STAT & COOPERATIVES SERVICE....  | 674       | -             | -               | -                 | -                           | 104                                         | -                | 570             | -                     |
| FOREST SERVICE.....                    | 1,419     | 1,251         | -               | -                 | 16                          | -                                           | -                | 152             | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION   | 80,712    | 56,037        | -               | 4,356             | 478                         | 26                                          | 2,817            | 16,998          | -                     |
| COOPERATIVE RESEARCH.....              | 76,091    | 52,246        | -               | 3,783             | 478                         | -                                           | 2,595            | 16,989          | -                     |
| FEDERAL RESEARCH.....                  | 4,621     | 3,791         | -               | 573               | -                           | 26                                          | 222              | 9               | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 112,066   | 9,693         | 2,896           | 9,163             | 8,385                       | 10,526                                      | 70,742           | 570             | 111                   |
| DEPARTMENT OF THE ARMY.....            | 13,902    | 7,066         | 492             | 1,694             | 70                          | 548                                         | 3,944            | 61              | 27                    |
| DEPARTMENT OF THE NAVY.....            | 9,880     | 193           | 267             | 1,709             | 3,541                       | 731                                         | 3,439            | -               | -                     |
| DEPARTMENT OF THE AIR FORCE.....       | 57,198    | 2,434         | 1,171           | 741               | 1,955                       | 42                                          | 50,855           | -               | -                     |
| DEFENSE AGENCIES.....                  | 30,944    | -             | 851             | 5,019             | 2,799                       | 9,205                                       | 12,504           | 484             | 84                    |
| DEPARTMENTWIDE FUNDS.....              | 140       | -             | 115             | -                 | -                           | -                                           | -                | 25              | -                     |
| DEPARTMENT OF ENERGY.....              | 62,827    | 17,854        | -               | 20,374            | 17,564                      | -                                           | 6,454            | 331             | 250                   |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 869,764   | 743,635       | 23,325          | 5,587             | -                           | 1,940                                       | 18,839           | 53,551          | 22,887                |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 55,829    | 26,155        | 17,418          | 31                | -                           | 798                                         | -                | 10,866          | 561                   |
| CENTER FOR DISEASE CONTROL.....        | 5,358     | 5,358         | -               | -                 | -                           | -                                           | -                | -               | -                     |
| FOOD AND DRUG ADMINISTRATION.....      | 8,425     | 8,425         | -               | -                 | -                           | -                                           | -                | -               | -                     |
| HEALTH CARE FINANCING ADMINISTRATION   | 1,727     | -             | -               | -                 | -                           | -                                           | -                | 1,727           | -                     |
| HEALTH RESOURCES ADMINISTRATION.....   | 7,114     | -             | -               | -                 | -                           | -                                           | -                | 7,114           | -                     |
| HEALTH SERVICES ADMINISTRATION.....    | 3,192     | 3,192         | -               | -                 | -                           | -                                           | -                | -               | -                     |
| HUMAN DEVELOPMENT SERVICES.....        | 23,260    | 10,944        | 660             | -                 | -                           | 173                                         | 3,442            | 8,041           | -                     |
| NATIONAL INSTITUTE OF EDUCATION.....   | 5,840     | -             | -               | -                 | -                           | -                                           | -                | 5,840           | -                     |
| NATIONAL INSTITUTES OF HEALTH.....     | 742,963   | 689,561       | 5,247           | 5,556             | -                           | 969                                         | 13,397           | 3,907           | 22,326                |
| OFFICE OF EDUCATION.....               | 5,749     | -             | -               | -                 | -                           | -                                           | -                | 5,749           | -                     |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 9,577     | -             | -               | -                 | -                           | -                                           | -                | 9,577           | -                     |
| OFFICE OF THE SECRETARY.....           | 172       | -             | -               | -                 | -                           | -                                           | -                | 172             | -                     |
| SOCIAL SECURITY ADMINISTRATION.....    | 558       | -             | -               | -                 | -                           | -                                           | -                | 558             | -                     |
| OTHER AGENCIES                         |           |               |                 |                   |                             |                                             |                  |                 |                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 33,071    | 3,312         | 261             | 7,461             | 11,427                      | 715                                         | 8,174            | 76              | 1,645                 |
| NATIONAL SCIENCE FOUNDATION.....       | 29,778    | 2,389         | -               | 3,100             | 2,173                       | 834                                         | 8,114            | 9,682           | 3,484                 |

NOTE: THE APPLIED RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 92 PERCENT OF TOTAL FEDERAL APPLIED RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-88. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | PSYCHOLOGY |                     |                |                             | PHYSICAL SCIENCES |           |           |         |                       |
|---------------------------------------------|------------|---------------------|----------------|-----------------------------|-------------------|-----------|-----------|---------|-----------------------|
|                                             | TOTAL      | BIO-LOGICAL ASPECTS | SOCIAL ASPECTS | PSYCHO-LOGICAL SCIENCES NEC | TOTAL             | ASTRONOMY | CHEMISTRY | PHYSICS | PHYSICAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 26,482     | 9,841               | 10,271         | 6,370                       | 50,041            | 2,644     | 15,444    | 27,841  | 4,112                 |
| DEPARTMENTS                                 |            |                     |                |                             |                   |           |           |         |                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | -          | -                   | -              | -                           | 4,356             | -         | 4,312     | 44      | -                     |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | -          | -                   | -              | -                           | 4,356             | -         | 4,312     | 44      | -                     |
| COOPERATIVE RESEARCH.....                   | -          | -                   | -              | -                           | 3,783             | -         | 3,783     | -       | -                     |
| FEDERAL RESEARCH.....                       | -          | -                   | -              | -                           | 573               | -         | 529       | 44      | -                     |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 2,896      | 111                 | 2,265          | 520                         | 9,163             | 49        | 1,630     | 5,290   | 2,194                 |
| DEPARTMENT OF THE ARMY.....                 | 492        | 53                  | 439            | -                           | 1,694             | -         | 1,330     | 359     | 5                     |
| DEPARTMENT OF THE NAVY.....                 | 247        | -                   | 247            | -                           | 1,709             | -         | -         | 1,709   | -                     |
| DEPARTMENT OF THE AIR FORCE.....            | 1,171      | 58                  | 1,113          | -                           | 741               | 49        | 242       | 430     | -                     |
| DEFENSE AGENCIES.....                       | 851        | -                   | 331            | 520                         | 5,019             | -         | 38        | 2,792   | 2,189                 |
| DEPARTMENTWIDE FUNDS.....                   | 115        | -                   | 115            | -                           | -                 | -         | -         | -       | -                     |
| DEPARTMENT OF ENERGY.....                   | -          | -                   | -              | -                           | 20,374            | -         | 2,160     | 18,214  | -                     |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 23,325     | 9,705               | 7,988          | 5,632                       | 5,587             | -         | 4,837     | 750     | -                     |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 17,418     | 9,705               | 7,713          | -                           | 31                | -         | 31        | -       | -                     |
| HUMAN DEVELOPMENT SERVICES.....             | 840        | -                   | 275            | 385                         | -                 | -         | -         | -       | -                     |
| NATIONAL INSTITUTES OF HEALTH.....          | 5,247      | -                   | -              | 5,247                       | 5,556             | -         | 4,806     | 750     | -                     |
| OTHER AGENCIES                              |            |                     |                |                             |                   |           |           |         |                       |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 261        | 25                  | 10             | 24                          | 7,461             | 2,595     | 682       | 2,266   | 1,918                 |
| NATIONAL SCIENCE FOUNDATION.....            | -          | -                   | -              | -                           | 3,100             | -         | 1,823     | 1,277   | -                     |

NOTE: THE APPLIED RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 92 PERCENT OF TOTAL FEDERAL APPLIED RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-89. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN LIFE AND ENVIRONMENTAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | LIFE SCIENCES |             |                  |                        |                   | ENVIRONMENTAL SCIENCES |              |             |              |                            |
|---------------------------------------------|---------------|-------------|------------------|------------------------|-------------------|------------------------|--------------|-------------|--------------|----------------------------|
|                                             | TOTAL         | BIO-LOGICAL | CLINICAL MEDICAL | OTHER MEDICAL SCIENCES | LIFE SCIENCES NEC | TOTAL                  | ATMOS-PHERIC | GEO-LOGICAL | OCEANOGRAPHY | ENVIRONMENTAL SCIENCES NEC |
| TOTAL, ALL AGENCIES.....                    | 834,171       | 198,026     | 481,885          | 120,672                | 33,588            | 40,023                 | 11,327       | 10,216      | 9,822        | 8,658                      |
| DEPARTMENTS                                 |               |             |                  |                        |                   |                        |              |             |              |                            |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 57,288        | 53,830      | 3,458            | -                      | -                 | 494                    | 494          | -           | -            | -                          |
| FOREST SERVICE.....                         | 1,251         | 1,251       | -                | -                      | -                 | 16                     | 16           | -           | -            | -                          |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 56,037        | 52,579      | 3,458            | -                      | -                 | 478                    | 478          | -           | -            | -                          |
| COOPERATIVE RESEARCH.....                   | 52,246        | 48,788      | 3,458            | -                      | -                 | 478                    | 478          | -           | -            | -                          |
| FEDERAL RESEARCH.....                       | 3,791         | 3,791       | -                | -                      | -                 | -                      | -            | -           | -            | -                          |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 9,693         | 677         | 5,618            | 3,398                  | -                 | 8,365                  | 2,059        | 2,545       | 3,693        | 68                         |
| DEPARTMENT OF THE ARMY.....                 | 7,066         | 537         | 5,545            | 984                    | -                 | 70                     | -            | 2           | -            | 68                         |
| DEPARTMENT OF THE NAVY.....                 | 193           | 120         | 73               | -                      | -                 | 3,541                  | -            | -           | 3,541        | -                          |
| DEPARTMENT OF THE AIR FORCE.....            | 2,434         | 20          | -                | 2,414                  | -                 | 1,955                  | 1,914        | 41          | -            | -                          |
| DEFENSE AGENCIES.....                       | -             | -           | -                | -                      | -                 | 2,799                  | 145          | 2,502       | 152          | -                          |
| DEPARTMENT OF ENERGY.....                   | 17,854        | 14,287      | 674              | 508                    | 2,385             | 17,564                 | 1,799        | 5,749       | 6,026        | 3,990                      |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL..... | 743,635       | 126,216     | 471,153          | 115,792                | 30,474            | -                      | -            | -           | -            | -                          |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.....    | 26,155        | 17,449      | 4,485            | 957                    | 5,264             | -                      | -            | -           | -            | -                          |
| CENTER FOR DISEASE CONTROL.....             | 5,358         | -           | -                | 5,358                  | -                 | -                      | -            | -           | -            | -                          |
| FOOD AND DRUG ADMINISTRATION.....           | 8,425         | 6,974       | -                | 1,451                  | -                 | -                      | -            | -           | -            | -                          |
| HEALTH SERVICES ADMINISTRATION.....         | 3,192         | -           | -                | 3,192                  | -                 | -                      | -            | -           | -            | -                          |
| HUMAN DEVELOPMENT SERVICES.....             | 10,944        | -           | 10,717           | 84                     | 143               | -                      | -            | -           | -            | -                          |
| NATIONAL INSTITUTES OF HEALTH.....          | 689,581       | 101,793     | 457,951          | 104,750                | 25,067            | -                      | -            | -           | -            | -                          |
| OTHER AGENCIES                              |               |             |                  |                        |                   |                        |              |             |              |                            |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 3,312         | 627         | 982              | 974                    | 729               | 14,427                 | 5,610        | 1,114       | 103          | 4,600                      |
| NATIONAL SCIENCE FOUNDATION.....            | 2,389         | 2,389       | -                | -                      | -                 | 2,173                  | 1,365        | 808         | -            | -                          |

NOTE: THE APPLIED RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 92 PERCENT OF TOTAL FEDERAL APPLIED RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-90. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                      | ENGINEERING |                   |                    |          |       |                 |                 |                                  |                    |
|---------------------------------------------|-------------|-------------------|--------------------|----------|-------|-----------------|-----------------|----------------------------------|--------------------|
|                                             | TOTAL       | AERO-<br>NAUTICAL | ASTRO-<br>NAUTICAL | CHEMICAL | CIVIL | ELEC-<br>TRICAL | MECHAN-<br>ICAL | METAL-<br>LURGY AND<br>MATERIALS | ENGINEERING<br>MEC |
| TOTAL, ALL AGENCIES.....                    | 115,140     | 27,417            | 6,059              | 7,965    | 1,624 | 11,911          | 3,783           | 6,841                            | 49,540             |
| DEPARTMENTS                                 |             |                   |                    |          |       |                 |                 |                                  |                    |
| DEPARTMENT OF AGRICULTURE, TOTAL.....       | 2,817       | -                 | -                  | -        | 5     | 21              | -               | -                                | 2,791              |
| SCIENCE AND EDUCATION ADMINISTRATION.....   | 2,817       | -                 | -                  | -        | 5     | 21              | -               | -                                | 2,791              |
| COOPERATIVE RESEARCH.....                   | 2,595       | -                 | -                  | -        | -     | -               | -               | -                                | 2,595              |
| FEDERAL RESEARCH.....                       | 222         | -                 | -                  | -        | 5     | 21              | -               | -                                | 196                |
| DEPARTMENT OF DEFENSE, TOTAL.....           | 70,742      | 24,813            | 5,724              | 3,523    | 953   | 8,986           | 1,712           | 4,626                            | 20,405             |
| DEPARTMENT OF THE ARMY.....                 | 3,944       | 479               | -                  | 213      | 287   | 2,048           | 425             | 346                              | 146                |
| DEPARTMENT OF THE NAVY.....                 | 3,439       | 79                | -                  | 2,668    | -     | 524             | -               | 168                              | -                  |
| DEPARTMENT OF THE AIR FORCE.....            | 50,855      | 24,250            | 5,724              | 642      | 540   | 3,459           | 1,247           | 3,316                            | 11,677             |
| DEFENSE AGENCIES.....                       | 12,504      | 5                 | -                  | -        | 126   | 2,955           | 40              | 796                              | 8,582              |
| DEPARTMENT OF ENERGY.....                   | 6,454       | -                 | -                  | 3,622    | -     | 98              | 695             | 708                              | 1,331              |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL..... | 18,839      | -                 | -                  | -        | -     | -               | -               | -                                | 18,839             |
| HUMAN DEVELOPMENT SERVICES.....             | 3,442       | -                 | -                  | -        | -     | -               | -               | -                                | 3,442              |
| NATIONAL INSTITUTES OF HEALTH.....          | 15,397      | -                 | -                  | -        | -     | -               | -               | -                                | 15,397             |
| OTHER AGENCIES                              |             |                   |                    |          |       |                 |                 |                                  |                    |
| NATIONAL AERONAUTICS & SPACE ADMIN.....     | 8,174       | 2,514             | 335                | 280      | 76    | 2,265           | 763             | 716                              | 1,225              |
| NATIONAL SCIENCE FOUNDATION.....            | 8,114       | 90                | -                  | 540      | 590   | 541             | 613             | 791                              | 4,949              |

NOTE: THE APPLIED RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 92 PERCENT OF TOTAL FEDERAL APPLIED RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-91. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH PERFORMED AT UNIVERSITIES AND COLLEGES IN MATHEMATICS AND COMPUTER SCIENCES AND IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | MATHEMATICS AND COMPUTER SCIENCES |                  |                      |                                                          | SOCIAL SCIENCES |                   |                |                           |                |                           |
|----------------------------------------|-----------------------------------|------------------|----------------------|----------------------------------------------------------|-----------------|-------------------|----------------|---------------------------|----------------|---------------------------|
|                                        | TOTAL                             | MATHE-<br>MATICS | COMPUTER<br>SCIENCES | MATHE-<br>MATICS<br>AND COM-<br>PUTER<br>SCIENCES<br>NEC | TOTAL           | ANTHRO-<br>POLOGY | ECONO-<br>MICS | POLITI-<br>CAL<br>SCIENCE | SOCI-<br>OLOGY | SOCIAL<br>SCIENCES<br>NEC |
| TOTAL, ALL AGENCIES.....               | 14,147                            | 2,954            | 11,106               | 87                                                       | 81,930          | 1,396             | 10,718         | 761                       | 11,124         | 49,931                    |
| DEPARTMENTS                            |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 130                               | 130              | -                    | -                                                        | 17,720          | -                 | 16,793         | -                         | 917            | 10                        |
| ECON. STAT & COOPERATIVES SERVICE....  | 104                               | 104              | -                    | -                                                        | 570             | -                 | 543            | -                         | 17             | 10                        |
| FOREST SERVICE.....                    | -                                 | -                | -                    | -                                                        | 152             | -                 | 152            | -                         | -              | -                         |
| SCIENCE AND EDUCATION ADMINISTRATION   | 26                                | 26               | -                    | -                                                        | 16,998          | -                 | 16,098         | -                         | 900            | -                         |
| COOPERATIVE RESEARCH.....              | -                                 | -                | -                    | -                                                        | 16,989          | -                 | 16,089         | -                         | 900            | -                         |
| FEDERAL RESEARCH.....                  | 26                                | 26               | -                    | -                                                        | 9               | -                 | 9              | -                         | -              | -                         |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 10,526                            | 669              | 9,770                | 87                                                       | 570             | -                 | 33             | 494                       | 43             | -                         |
| DEPARTMENT OF THE ARMY.....            | 548                               | 186              | 362                  | -                                                        | 61              | -                 | 18             | -                         | 43             | -                         |
| DEPARTMENT OF THE NAVY.....            | 731                               | 464              | 267                  | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEPARTMENT OF THE AIR FORCE.....       | 42                                | 19               | 23                   | -                                                        | -               | -                 | -              | -                         | -              | -                         |
| DEFENSE AGENCIES.....                  | 9,205                             | -                | 9,118                | 87                                                       | 484             | -                 | 15             | 469                       | -              | -                         |
| DEPARTMENTWIDE FUNDS.....              | -                                 | -                | -                    | -                                                        | 25              | -                 | -              | 25                        | -              | -                         |
| DEPARTMENT OF ENERGY.....              | -                                 | -                | -                    | -                                                        | 331             | -                 | 331            | -                         | -              | -                         |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 1,940                             | 1,767            | 173                  | -                                                        | 53,551          | 1,396             | 702            | 133                       | 10,008         | 41,312                    |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH.   | 798                               | 798              | -                    | -                                                        | 10,866          | 1,396             | 119            | 115                       | 8,198          | 1,038                     |
| HEALTH CARE FINANCING ADMINISTRATION   | -                                 | -                | -                    | -                                                        | 1,727           | -                 | -              | -                         | -              | 1,727                     |
| HEALTH RESOURCES ADMINISTRATION.....   | -                                 | -                | -                    | -                                                        | 7,114           | -                 | -              | -                         | -              | 7,114                     |
| HUMAN DEVELOPMENT SERVICES.....        | 173                               | -                | 173                  | -                                                        | 8,041           | -                 | 150            | -                         | 1,309          | 6,582                     |
| NATIONAL INSTITUTE OF EDUCATION.....   | -                                 | -                | -                    | -                                                        | 5,840           | -                 | -              | -                         | -              | 5,840                     |
| NATIONAL INSTITUTES OF HEALTH.....     | 969                               | 969              | -                    | -                                                        | 3,907           | -                 | -              | -                         | -              | 3,907                     |
| OFFICE OF EDUCATION.....               | -                                 | -                | -                    | -                                                        | 5,749           | -                 | -              | -                         | -              | 5,749                     |
| OFFICE OF ASS'T SECTY FOR HEALTH....   | -                                 | -                | -                    | -                                                        | 9,577           | -                 | 381            | 18                        | 381            | 8,797                     |
| OFFICE OF THE SECRETARY.....           | -                                 | -                | -                    | -                                                        | 172             | -                 | 52             | -                         | 120            | -                         |
| SOCIAL SECURITY ADMINISTRATION.....    | -                                 | -                | -                    | -                                                        | 558             | -                 | -              | -                         | -              | 558                       |
| OTHER AGENCIES                         |                                   |                  |                      |                                                          |                 |                   |                |                           |                |                           |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 715                               | 218              | 497                  | -                                                        | 76              | -                 | -              | 30                        | -              | 46                        |
| NATIONAL SCIENCE FOUNDATION.....       | 836                               | 170              | 666                  | -                                                        | 9,682           | -                 | 859            | 104                       | 156            | 8,563                     |

NOTE: THE APPLIED RESEARCH OBLIGATIONS OF THE SIX AGENCIES INCLUDED IN THIS TABLE REPRESENT APPROXIMATELY 92 PERCENT OF TOTAL FEDERAL APPLIED RESEARCH OBLIGATIONS TO UNIVERSITIES AND COLLEGES IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-92. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| REGION AND COUNTRY               | TOTAL  | DEPARTMENT<br>OF<br>AGRICUL-<br>TURE | DEPARTMENT<br>OF<br>DEFENSE | DEPARTMENT<br>OF<br>ENERGY | DEPARTMENT<br>OF<br>H.E.W. | DEPARTMENT<br>OF<br>STATE | ENVIRON-<br>MENTAL<br>PROTECTION<br>AGENCY | NATIONAL<br>SCIENCE<br>FOUNDATION | OTHER |
|----------------------------------|--------|--------------------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|--------------------------------------------|-----------------------------------|-------|
| TOTAL, ALL COUNTRIES.....        | 88,185 | 5,980                                | 15,094                      | 10,751                     | 36,606                     | 5,765                     | 6,028                                      | 3,471                             | 4,490 |
| EUROPE, TOTAL.....               | 33,049 | 948                                  | 5,841                       | 10,563                     | 9,105                      | 40                        | 2,723                                      | 1,481                             | 2,388 |
| AUSTRIA.....                     | 248    | -                                    | 33                          | 86                         | 102                        | -                         | -                                          | -                                 | 27    |
| BELGIUM.....                     | 388    | -                                    | 264                         | -                          | 102                        | -                         | -                                          | 5                                 | 17    |
| DENMARK.....                     | 376    | -                                    | 40                          | 146                        | 93                         | -                         | -                                          | 68                                | 29    |
| FINLAND.....                     | 429    | -                                    | 6                           | 79                         | 344                        | -                         | -                                          | -                                 | -     |
| FRANCE.....                      | 905    | -                                    | 104                         | 28                         | 576                        | 7                         | 84                                         | 65                                | 39    |
| ICELAND.....                     | 169    | -                                    | 49                          | 85                         | 35                         | -                         | -                                          | -                                 | -     |
| IRELAND.....                     | 35     | -                                    | 35                          | -                          | -                          | -                         | -                                          | -                                 | -     |
| ITALY.....                       | 21,571 | 20                                   | 20                          | -                          | 1,457                      | 24                        | -                                          | -                                 | 50    |
| NETHERLANDS.....                 | 816    | -                                    | 83                          | -                          | 712                        | -                         | -                                          | -                                 | 21    |
| NORWAY.....                      | 146    | -                                    | 112                         | -                          | 34                         | -                         | -                                          | -                                 | -     |
| POLAND.....                      | 12,529 | 928                                  | -                           | 6,547                      | 1,255                      | -                         | 1,972                                      | 1,041                             | 786   |
| PORTUGAL.....                    | 40     | -                                    | 4                           | -                          | 36                         | -                         | -                                          | -                                 | -     |
| SPAIN.....                       | 145    | -                                    | 53                          | 50                         | 41                         | 1                         | -                                          | -                                 | -     |
| SWEDEN.....                      | 2,694  | -                                    | 94                          | -                          | 1,650                      | -                         | -                                          | -                                 | 950   |
| SWITZERLAND.....                 | 1,253  | -                                    | 20                          | -                          | 727                        | -                         | 17                                         | 189                               | 300   |
| UNITED KINGDOM, TOTAL.....       | 10,643 | -                                    | 4,742                       | 3,484                      | 1,685                      | 8                         | 499                                        | 113                               | 112   |
| ENGLAND.....                     | 10,646 | -                                    | 4,687                       | 3,484                      | 1,562                      | 7                         | 499                                        | 95                                | 112   |
| SCOTLAND.....                    | 170    | -                                    | 55                          | -                          | 114                        | 1                         | -                                          | -                                 | -     |
| BERMUDA.....                     | 18     | -                                    | -                           | -                          | -                          | -                         | -                                          | 18                                | -     |
| OTHER UNITED KINGDOM.....        | 9      | -                                    | -                           | -                          | 9                          | -                         | -                                          | -                                 | -     |
| WEST GERMANY.....                | 493    | -                                    | 182                         | -                          | 215                        | -                         | 39                                         | -                                 | 57    |
| YUGOSLAVIA.....                  | 151    | -                                    | -                           | -                          | 41                         | -                         | 110                                        | -                                 | -     |
| OTHER EUROPE.....                | 58     | -                                    | -                           | 58                         | -                          | -                         | -                                          | -                                 | -     |
| ASIA, TOTAL.....                 | 9,942  | 3,387                                | 1,182                       | 9                          | 2,711                      | 1,407                     | 10                                         | 638                               | 598   |
| HONG KONG.....                   | 99     | -                                    | -                           | -                          | 99                         | -                         | -                                          | -                                 | -     |
| INDIA.....                       | 2,264  | 598                                  | -                           | -                          | 1,379                      | -                         | -                                          | -                                 | 287   |
| JAPAN.....                       | 662    | -                                    | -                           | 9                          | 515                        | -                         | -                                          | -                                 | 138   |
| SOUTH KOREA.....                 | 57     | -                                    | 46                          | -                          | 11                         | -                         | -                                          | -                                 | -     |
| MALAYSIA.....                    | 400    | -                                    | 400                         | -                          | -                          | -                         | -                                          | -                                 | -     |
| PAKISTAN.....                    | 3,486  | 2,162                                | -                           | -                          | 529                        | -                         | 10                                         | 638                               | 147   |
| PHILIPPINES.....                 | 28     | -                                    | 28                          | -                          | -                          | -                         | -                                          | -                                 | -     |
| TAIWAN.....                      | 750    | -                                    | 703                         | -                          | 47                         | -                         | -                                          | -                                 | -     |
| THAILAND.....                    | 753    | 620                                  | -                           | -                          | 131                        | 2                         | -                                          | -                                 | -     |
| OTHER ASIA.....                  | 1,443  | 7                                    | 5                           | -                          | -                          | 1,405                     | -                                          | -                                 | 26    |
| NEAR EAST, TOTAL.....            | 20,269 | 1,504                                | 3,728                       | 12                         | 11,296                     | -                         | 3,027                                      | 404                               | 298   |
| ISRAEL.....                      | 4,789  | -                                    | 877                         | 12                         | 3,683                      | -                         | 183                                        | -                                 | 34    |
| JORDAN.....                      | 21     | -                                    | 21                          | -                          | -                          | -                         | -                                          | -                                 | -     |
| UNITED ARAB REPUBLIC.....        | 15,133 | 1,504                                | 2,768                       | -                          | 7,613                      | -                         | 2,844                                      | 404                               | -     |
| OTHER NEAR EAST.....             | 326    | -                                    | 62                          | -                          | -                          | -                         | -                                          | -                                 | 264   |
| AFRICA, TOTAL.....               | 4,296  | 141                                  | 58                          | -                          | 822                        | 3,432                     | -                                          | 43                                | -     |
| SUDAN.....                       | 1      | -                                    | 1                           | -                          | -                          | -                         | -                                          | -                                 | -     |
| UGANDA.....                      | 67     | -                                    | -                           | -                          | 67                         | -                         | -                                          | -                                 | -     |
| UNION OF SOUTH AFRICA.....       | 44     | -                                    | -                           | -                          | 44                         | -                         | -                                          | -                                 | -     |
| OTHER AFRICA.....                | 4,184  | 141                                  | 57                          | -                          | 911                        | 3,432                     | -                                          | 43                                | -     |
| LATIN AMERICA, TOTAL.....        | 2,145  | -                                    | 73                          | -                          | 313                        | 884                       | -                                          | 875                               | -     |
| ARGENTINA.....                   | 1,026  | -                                    | -                           | -                          | 151                        | -                         | -                                          | 875                               | -     |
| BOLIVIA.....                     | 14     | -                                    | 14                          | -                          | -                          | -                         | -                                          | -                                 | -     |
| BRAZIL.....                      | 8      | -                                    | 8                           | -                          | -                          | -                         | -                                          | -                                 | -     |
| CHILE.....                       | 165    | -                                    | 40                          | -                          | -                          | 125                       | -                                          | -                                 | -     |
| COLOMBIA.....                    | 185    | -                                    | -                           | -                          | 98                         | 87                        | -                                          | -                                 | -     |
| MEXICO.....                      | 57     | -                                    | -                           | -                          | 57                         | -                         | -                                          | -                                 | -     |
| PERU.....                        | 151    | -                                    | 11                          | -                          | -                          | 140                       | -                                          | -                                 | -     |
| URUGUAY.....                     | 7      | -                                    | -                           | -                          | 7                          | -                         | -                                          | -                                 | -     |
| OTHER LATIN AMERICA.....         | 532    | -                                    | -                           | -                          | -                          | 532                       | -                                          | -                                 | -     |
| AUSTRALIA.....                   | 1,395  | -                                    | 224                         | -                          | 1,057                      | -                         | -                                          | -                                 | 114   |
| CANADA.....                      | 11,359 | -                                    | 3,988                       | 167                        | 5,812                      | 2                         | 268                                        | 30                                | 1,092 |
| NEW ZEALAND.....                 | 57     | -                                    | -                           | -                          | 57                         | -                         | -                                          | -                                 | -     |
| INTERNATIONAL ORGANIZATIONS..... | 5,633  | -                                    | -                           | -                          | 5,633                      | -                         | -                                          | -                                 | -     |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE G-93. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| REGION AND COUNTRY               | TOTAL   | DEPARTMENT<br>OF<br>AGRICUL-<br>TURE | DEPARTMENT<br>OF<br>DEFENSE | DEPARTMENT<br>OF<br>ENERGY | DEPARTMENT<br>OF<br>H.E.W. | DEPARTMENT<br>OF<br>STATE | ENVIRON-<br>MENTAL<br>PROTECTION<br>AGENCY | NATIONAL<br>SCIENCE<br>FOUNDATION | OTHER |
|----------------------------------|---------|--------------------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|--------------------------------------------|-----------------------------------|-------|
| TOTAL, ALL COUNTRIES.....        | 124,031 | 7,943                                | 32,198                      | 7,309                      | 44,044                     | 17,881                    | 7,000                                      | 4,269                             | 3,387 |
| EUROPE, TOTAL.....               | 40,154  | 10                                   | 21,658                      | 4,939                      | 8,571                      | 49                        | 1,250                                      | 492                               | 1,187 |
| AUSTRIA.....                     | 230     | -                                    | 34                          | 66                         | 105                        | -                         | -                                          | -                                 | 25    |
| BELGIUM.....                     | 371     | -                                    | 271                         | -                          | 95                         | -                         | -                                          | 5                                 | -     |
| DENMARK.....                     | 247     | -                                    | 17                          | -                          | 100                        | -                         | -                                          | 70                                | 60    |
| FINLAND.....                     | 477     | -                                    | 2                           | 80                         | 395                        | -                         | -                                          | -                                 | -     |
| FRANCE.....                      | 1,037   | -                                    | 123                         | 30                         | 687                        | 7                         | 100                                        | 65                                | 25    |
| ICELAND.....                     | 168     | -                                    | 51                          | 117                        | -                          | -                         | -                                          | -                                 | -     |
| IRELAND.....                     | 88      | -                                    | 35                          | -                          | 53                         | -                         | -                                          | -                                 | -     |
| ITALY.....                       | 1,601   | 10                                   | 22                          | -                          | 1,495                      | 24                        | -                                          | -                                 | 50    |
| NETHERLANDS.....                 | 615     | -                                    | 63                          | -                          | 727                        | -                         | -                                          | -                                 | 25    |
| NORWAY.....                      | 2,086   | -                                    | 1,752                       | -                          | 34                         | -                         | -                                          | -                                 | 300   |
| POLAND.....                      | 622     | -                                    | -                           | -                          | 222                        | -                         | 50                                         | -                                 | 350   |
| PORTUGAL.....                    | 5       | -                                    | 5                           | -                          | -                          | -                         | -                                          | -                                 | -     |
| SPAIN.....                       | 102     | -                                    | 47                          | 54                         | -                          | 1                         | -                                          | -                                 | -     |
| SWEDEN.....                      | 1,899   | -                                    | 96                          | -                          | 1,753                      | -                         | -                                          | -                                 | 50    |
| SWITZERLAND.....                 | 1,062   | -                                    | 42                          | -                          | 765                        | -                         | 50                                         | 205                               | -     |
| UNITED KINGDOM, TOTAL.....       | 21,698  | -                                    | 15,512                      | 3,230                      | 1,850                      | 17                        | 750                                        | 147                               | 192   |
| ENGLAND.....                     | 21,505  | -                                    | 15,453                      | 3,230                      | 1,747                      | 16                        | 750                                        | 117                               | 192   |
| SCOTLAND.....                    | 152     | -                                    | 59                          | -                          | 92                         | 1                         | -                                          | -                                 | -     |
| BERMUDA.....                     | 30      | -                                    | -                           | -                          | -                          | -                         | -                                          | 30                                | -     |
| OTHER UNITED KINGDOM.....        | 11      | -                                    | -                           | -                          | 11                         | -                         | -                                          | -                                 | -     |
| WEST GERMANY.....                | 4,498   | -                                    | 3,586                       | 362                        | 290                        | -                         | 150                                        | -                                 | 110   |
| YUGOSLAVIA.....                  | 150     | -                                    | -                           | -                          | -                          | -                         | 150                                        | -                                 | -     |
| OTHER EUROPE.....                | 3,000   | -                                    | -                           | 3,000                      | -                          | -                         | -                                          | -                                 | -     |
| ASIA, TOTAL.....                 | 24,729  | 4,833                                | 986                         | -                          | 5,438                      | 8,935                     | 2,450                                      | 1,502                             | 585   |
| BURMA.....                       | 100     | 100                                  | -                           | -                          | -                          | -                         | -                                          | -                                 | -     |
| HONG KONG.....                   | 81      | -                                    | -                           | -                          | 81                         | -                         | -                                          | -                                 | -     |
| INDIA.....                       | 8,266   | 1,500                                | -                           | -                          | 2,858                      | 2,000                     | 1,000                                      | 488                               | 420   |
| INDONESIA.....                   | 1,920   | -                                    | -                           | -                          | -                          | 1,920                     | -                                          | -                                 | -     |
| JAPAN.....                       | 580     | -                                    | -                           | -                          | 580                        | -                         | -                                          | -                                 | -     |
| SOUTH KOREA.....                 | 56      | -                                    | 47                          | -                          | 11                         | -                         | -                                          | -                                 | -     |
| MALAYSIA.....                    | 418     | -                                    | 418                         | -                          | -                          | -                         | -                                          | -                                 | -     |
| PAKISTAN.....                    | 8,318   | 2,583                                | -                           | -                          | 1,741                      | 1,390                     | 1,450                                      | 1,014                             | 140   |
| PHILIPPINES.....                 | 2,113   | -                                    | 34                          | -                          | -                          | 2,079                     | -                                          | -                                 | -     |
| TAIWAN.....                      | 529     | -                                    | 482                         | -                          | 47                         | -                         | -                                          | -                                 | -     |
| THAILAND.....                    | 772     | 650                                  | -                           | -                          | 120                        | 2                         | -                                          | -                                 | -     |
| OTHER ASIA.....                  | 1,574   | -                                    | 5                           | -                          | -                          | 1,544                     | -                                          | -                                 | 25    |
| NEAR EAST, TOTAL.....            | 30,044  | 3,000                                | 5,668                       | 318                        | 13,042                     | 3,700                     | 2,786                                      | 1,200                             | 330   |
| GREECE.....                      | 300     | -                                    | -                           | 300                        | -                          | -                         | -                                          | -                                 | -     |
| ISRAEL.....                      | 5,732   | -                                    | 982                         | 18                         | 4,482                      | -                         | 250                                        | -                                 | -     |
| JORDAN.....                      | 22      | -                                    | 22                          | -                          | -                          | -                         | -                                          | -                                 | -     |
| UNITED ARAB REPUBLIC.....        | 22,973  | 3,000                                | 4,597                       | -                          | 8,560                      | 3,000                     | 2,536                                      | 1,200                             | 80    |
| OTHER NEAR EAST.....             | 1,017   | -                                    | 67                          | -                          | -                          | 700                       | -                                          | -                                 | 250   |
| AFRICA, TOTAL.....               | 4,257   | 100                                  | 9                           | -                          | 96                         | 3,997                     | -                                          | 35                                | -     |
| SUDAN.....                       | 2       | -                                    | 2                           | -                          | -                          | -                         | -                                          | -                                 | -     |
| OTHER AFRICA.....                | 4,255   | 100                                  | 7                           | -                          | 96                         | 3,997                     | -                                          | 35                                | -     |
| LATIN AMERICA, TOTAL.....        | 2,531   | -                                    | 104                         | -                          | 229                        | 1,198                     | -                                          | 1,000                             | -     |
| ARGENTINA.....                   | 1,170   | -                                    | 25                          | -                          | 145                        | -                         | -                                          | 1,000                             | -     |
| BOLIVIA.....                     | 21      | -                                    | 21                          | -                          | -                          | -                         | -                                          | -                                 | -     |
| BRAZIL.....                      | 9       | -                                    | 9                           | -                          | -                          | -                         | -                                          | -                                 | -     |
| CHILE.....                       | 139     | -                                    | 41                          | -                          | -                          | 98                        | -                                          | -                                 | -     |
| MEXICO.....                      | 78      | -                                    | -                           | -                          | 78                         | -                         | -                                          | -                                 | -     |
| PERU.....                        | 108     | -                                    | 8                           | -                          | -                          | 100                       | -                                          | -                                 | -     |
| URUGUAY.....                     | 6       | -                                    | -                           | -                          | 6                          | -                         | -                                          | -                                 | -     |
| OTHER LATIN AMERICA.....         | 1,000   | -                                    | -                           | -                          | -                          | 1,000                     | -                                          | -                                 | -     |
| AUSTRALIA.....                   | 1,445   | -                                    | 245                         | -                          | 1,100                      | -                         | -                                          | -                                 | 100   |
| CANADA.....                      | 13,235  | -                                    | 3,528                       | 52                         | 7,934                      | 2                         | 514                                        | 20                                | 1,185 |
| NEW ZEALAND.....                 | 74      | -                                    | -                           | -                          | 74                         | -                         | -                                          | -                                 | -     |
| INTERNATIONAL ORGANIZATIONS..... | 7,560   | -                                    | -                           | -                          | 7,560                      | -                         | -                                          | -                                 | -     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-94. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| REGION AND COUNTRY               | TOTAL  | DEPARTMENT OF AGRICULTURE | DEPARTMENT OF DEFENSE | DEPARTMENT OF H.E.W. | NATIONAL SCIENCE FOUNDATION | NATIONAL AERONAUTICS AND SPACE ADMIN. | OTHER |
|----------------------------------|--------|---------------------------|-----------------------|----------------------|-----------------------------|---------------------------------------|-------|
| TOTAL, ALL COUNTRIES.....        | 17,423 | 2,990                     | 5,685                 | 4,853                | 2,299                       | 902                                   | 694   |
| EUROPE, TOTAL.....               | 4,948  | 789                       | 1,282                 | 1,392                | 1,139                       | 55                                    | 291   |
| AUSTRIA.....                     | 29     | -                         | 23                    | -                    | -                           | 6                                     | -     |
| BELGIUM.....                     | 129    | -                         | 35                    | 89                   | 5                           | -                                     | -     |
| DENMARK.....                     | 96     | -                         | -                     | 21                   | 68                          | 7                                     | -     |
| FINLAND.....                     | 77     | -                         | -                     | 77                   | -                           | -                                     | -     |
| FRANCE.....                      | 156    | -                         | 42                    | 49                   | 65                          | -                                     | -     |
| ICELAND.....                     | 5      | -                         | 5                     | -                    | -                           | -                                     | -     |
| IRELAND.....                     | 35     | -                         | 35                    | -                    | -                           | -                                     | -     |
| ITALY.....                       | 59     | 14                        | 20                    | 25                   | -                           | -                                     | -     |
| NETHERLANDS.....                 | 126    | -                         | 10                    | 116                  | -                           | -                                     | -     |
| NORWAY.....                      | 8      | -                         | 8                     | -                    | -                           | -                                     | -     |
| POLAND.....                      | 1,765  | 775                       | -                     | -                    | 699                         | -                                     | 291   |
| PORTUGAL.....                    | 4      | -                         | 4                     | -                    | -                           | -                                     | -     |
| SPAIN.....                       | 5      | -                         | 5                     | -                    | -                           | -                                     | -     |
| SWEDEN.....                      | 596    | -                         | 60                    | 536                  | -                           | -                                     | -     |
| SWITZERLAND.....                 | 323    | -                         | 10                    | 124                  | 189                         | -                                     | -     |
| UNITED KINGDOM, TOTAL.....       | 1,329  | -                         | 893                   | 316                  | 113                         | 7                                     | -     |
| ENGLAND.....                     | 1,207  | -                         | 866                   | 239                  | 95                          | 7                                     | -     |
| SCOTLAND.....                    | 104    | -                         | 27                    | 77                   | -                           | -                                     | -     |
| BERMUDA.....                     | 18     | -                         | -                     | -                    | 18                          | -                                     | -     |
| WEST GERMANY.....                | 167    | -                         | 132                   | -                    | -                           | 35                                    | -     |
| YUGOSLAVIA.....                  | 39     | -                         | -                     | 39                   | -                           | -                                     | -     |
| ASIA, TOTAL.....                 | 2,437  | 1,420                     | 628                   | 226                  | 122                         | -                                     | 241   |
| INDIA.....                       | 425    | 119                       | -                     | 149                  | -                           | -                                     | 157   |
| JAPAN.....                       | 56     | -                         | -                     | 56                   | -                           | -                                     | -     |
| SOUTH KOREA.....                 | 11     | -                         | -                     | 11                   | -                           | -                                     | -     |
| MALAYSIA.....                    | 35     | -                         | 35                    | -                    | -                           | -                                     | -     |
| PAKISTAN.....                    | 1,124  | 918                       | -                     | -                    | 122                         | -                                     | 84    |
| TAIWAN.....                      | 593    | -                         | 593                   | -                    | -                           | -                                     | -     |
| THAILAND.....                    | 393    | 383                       | -                     | 10                   | -                           | -                                     | -     |
| NEAR EAST, TOTAL.....            | 4,792  | 723                       | 3,079                 | 717                  | 104                         | 7                                     | 162   |
| ISRAEL.....                      | 1,045  | -                         | 309                   | 717                  | -                           | 7                                     | 12    |
| JORDAN.....                      | 2      | -                         | 2                     | -                    | -                           | -                                     | -     |
| UNITED ARAB REPUBLIC.....        | 3,595  | 723                       | 2,768                 | -                    | 104                         | -                                     | -     |
| OTHER NEAR EAST.....             | 150    | -                         | -                     | -                    | -                           | -                                     | 150   |
| AFRICA, TOTAL.....               | 138    | 58                        | 51                    | -                    | 29                          | -                                     | -     |
| SUDAN.....                       | 1      | -                         | 1                     | -                    | -                           | -                                     | -     |
| OTHER AFRICA.....                | 137    | 58                        | 50                    | -                    | 29                          | -                                     | -     |
| LATIN AMERICA, TOTAL.....        | 1,007  | -                         | 4                     | 128                  | 875                         | -                                     | -     |
| ARGENTINA.....                   | 939    | -                         | -                     | 64                   | 875                         | -                                     | -     |
| CHILE.....                       | 4      | -                         | 4                     | -                    | -                           | -                                     | -     |
| MEXICO.....                      | 57     | -                         | -                     | 57                   | -                           | -                                     | -     |
| URUGUAY.....                     | 7      | -                         | -                     | 7                    | -                           | -                                     | -     |
| AUSTRALIA.....                   | 339    | -                         | 16                    | 209                  | -                           | 114                                   | -     |
| CANADA.....                      | 2,131  | -                         | 625                   | 750                  | 30                          | 726                                   | -     |
| NEW ZEALAND.....                 | 57     | -                         | -                     | 57                   | -                           | -                                     | -     |
| INTERNATIONAL ORGANIZATIONS..... | 1,374  | -                         | -                     | 1,374                | -                           | -                                     | -     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-95. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY: FISCAL YEAR 1978 (ESTIMATED)

(THOUSANDS OF DOLLARS)

| REGION AND COUNTRY               | TOTAL  | DEPARTMENT<br>OF<br>AGRICULTURE | DEPARTMENT<br>OF<br>DEFENSE | DEPARTMENT<br>OF<br>H.E.W. | NATIONAL<br>SCIENCE<br>FOUNDATION | NATIONAL<br>AERONAUTICS<br>AND SPACE<br>ADMIN | OTHER |
|----------------------------------|--------|---------------------------------|-----------------------------|----------------------------|-----------------------------------|-----------------------------------------------|-------|
| TOTAL, ALL COUNTRIES.....        | 23,390 | 3,318                           | 7,655                       | 7,734                      | 3,072                             | 819                                           | 792   |
| EUROPE, TOTAL.....               | 3,574  | 7                               | 1,399                       | 1,381                      | 492                               | 45                                            | 250   |
| AUSTRIA.....                     | 33     | -                               | 28                          | -                          | -                                 | 5                                             | -     |
| BELGIUM.....                     | 119    | -                               | 38                          | 74                         | 5                                 | -                                             | -     |
| DENMARK.....                     | 102    | -                               | 5                           | 27                         | 70                                | -                                             | -     |
| FINLAND.....                     | 88     | -                               | -                           | 88                         | -                                 | -                                             | -     |
| FRANCE.....                      | 154    | -                               | 48                          | 41                         | 65                                | -                                             | -     |
| ICELAND.....                     | 6      | -                               | 6                           | -                          | -                                 | -                                             | -     |
| IRELAND.....                     | 35     | -                               | 35                          | -                          | -                                 | -                                             | -     |
| ITALY.....                       | 61     | 7                               | 22                          | 32                         | -                                 | -                                             | -     |
| NETHERLANDS.....                 | 129    | -                               | 11                          | 118                        | 7                                 | -                                             | -     |
| NORWAY.....                      | 5      | -                               | 5                           | -                          | -                                 | -                                             | -     |
| POLAND.....                      | 250    | -                               | -                           | -                          | -                                 | -                                             | 250   |
| PORTUGAL.....                    | 5      | -                               | 5                           | -                          | -                                 | -                                             | -     |
| SPAIN.....                       | 10     | -                               | 10                          | -                          | -                                 | -                                             | -     |
| SWEDEN.....                      | 638    | -                               | 68                          | 570                        | -                                 | -                                             | -     |
| SWITZERLAND.....                 | 318    | -                               | 10                          | 103                        | 205                               | -                                             | -     |
| UNITED KINGDOM, TOTAL.....       | 1,432  | -                               | 950                         | 326                        | 147                               | 9                                             | -     |
| ENGLAND.....                     | 1,322  | -                               | 918                         | 278                        | 117                               | 9                                             | -     |
| SCOTLAND.....                    | 80     | -                               | 32                          | 48                         | -                                 | -                                             | -     |
| BERMUDA.....                     | 30     | -                               | -                           | -                          | 30                                | -                                             | -     |
| WEST GERMANY.....                | 189    | -                               | 158                         | -                          | -                                 | 31                                            | -     |
| ASIA, TOTAL.....                 | 3,787  | 1,847                           | 422                         | 390                        | 762                               | -                                             | 366   |
| BURMA.....                       | 50     | 50                              | -                           | -                          | -                                 | -                                             | -     |
| INDIA.....                       | 1,068  | 299                             | -                           | 238                        | 285                               | -                                             | 246   |
| JAPAN.....                       | 63     | -                               | -                           | 63                         | -                                 | -                                             | -     |
| SOUTH KOREA.....                 | 11     | -                               | -                           | 11                         | -                                 | -                                             | -     |
| MALAYSIA.....                    | 38     | -                               | 38                          | -                          | -                                 | -                                             | -     |
| PAKISTAN.....                    | 1,744  | 1,097                           | -                           | 70                         | 477                               | -                                             | 100   |
| TAIWAN.....                      | 384    | -                               | 384                         | -                          | -                                 | -                                             | -     |
| THAILAND.....                    | 409    | 401                             | -                           | 8                          | -                                 | -                                             | -     |
| NEAR EAST, TOTAL.....            | 8,618  | 1,414                           | 5,000                       | 1,265                      | 743                               | -                                             | 196   |
| ISRAEL.....                      | 1,310  | -                               | 401                         | 891                        | -                                 | -                                             | 18    |
| JORDAN.....                      | 2      | -                               | 2                           | -                          | -                                 | -                                             | -     |
| UNITED ARAB REPUBLIC.....        | 7,126  | 1,414                           | 4,597                       | 374                        | 743                               | -                                             | -     |
| OTHER NEAR EAST.....             | 178    | -                               | -                           | -                          | -                                 | -                                             | 178   |
| AFRICA, TOTAL.....               | 107    | 50                              | 2                           | -                          | 55                                | -                                             | -     |
| SUDAN.....                       | 2      | -                               | 2                           | -                          | -                                 | -                                             | -     |
| OTHER AFRICA.....                | 105    | 50                              | -                           | -                          | 55                                | -                                             | -     |
| LATIN AMERICA, TOTAL.....        | 1,172  | -                               | 30                          | 142                        | 1,000                             | -                                             | -     |
| ARGENTINA.....                   | 1,083  | -                               | 25                          | 58                         | 1,000                             | -                                             | -     |
| CHILE.....                       | 5      | -                               | 5                           | -                          | -                                 | -                                             | -     |
| MEXICO.....                      | 78     | -                               | -                           | 78                         | -                                 | -                                             | -     |
| URUGUAY.....                     | 6      | -                               | -                           | 6                          | -                                 | -                                             | -     |
| AUSTRALIA.....                   | 338    | -                               | 21                          | 217                        | -                                 | 100                                           | -     |
| CANADA.....                      | 2,504  | -                               | 781                         | 1,029                      | 20                                | 674                                           | -     |
| NEW ZEALAND.....                 | 74     | -                               | -                           | 74                         | -                                 | -                                             | -     |
| INTERNATIONAL ORGANIZATIONS..... | 3,236  | -                               | -                           | 3,236                      | -                                 | -                                             | -     |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-96. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | ACTUAL, 1977 |                                  | ESTIMATES |                                  |         |                                  |
|-----------------------------------------------------------|--------------|----------------------------------|-----------|----------------------------------|---------|----------------------------------|
|                                                           | TOTAL        | SPECIAL FOREIGN CURRENCY PROGRAM | 1978      |                                  | 1979    |                                  |
|                                                           |              |                                  | TOTAL     | SPECIAL FOREIGN CURRENCY PROGRAM | TOTAL   | SPECIAL FOREIGN CURRENCY PROGRAM |
| TOTAL, ALL AGENCIES.....                                  | 88,185       | 28,913                           | 124,031   | 38,106                           | 123,860 | 37,809                           |
| DEPARTMENTS                                               |              |                                  |           |                                  |         |                                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                     | 5,980        | 5,360                            | 7,943     | 7,294                            | 7,200   | 6,550                            |
| SCIENCE AND EDUCATION ADMINISTRATION.....                 | 5,980        | 5,360                            | 7,943     | 7,294                            | 7,200   | 6,550                            |
| FEDERAL RESEARCH.....                                     | 5,980        | 5,360                            | 7,943     | 7,294                            | 7,200   | 6,550                            |
| DEPARTMENT OF COMMERCE, TOTAL.....                        | 494          | -                                | 300       | -                                | 261     | -                                |
| NATIONAL BUREAU OF STANDARDS.....                         | 94           | -                                | 250       | -                                | 175     | -                                |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....      | 400          | -                                | 50        | -                                | 86      | -                                |
| DEPARTMENT OF DEFENSE, TOTAL.....                         | 15,094       | 2,768                            | 32,198    | 4,592                            | 34,888  | 5,412                            |
| DEPARTMENT OF THE ARMY.....                               | 1,974        | -                                | 4,824     | -                                | 1,795   | -                                |
| DEPARTMENT OF THE NAVY.....                               | 7,733        | 2,768                            | 11,438    | 4,592                            | 12,008  | 5,412                            |
| DEPARTMENT OF THE AIR FORCE.....                          | 5,197        | -                                | 15,724    | -                                | 20,903  | -                                |
| DEFENSE AGENCIES.....                                     | 190          | -                                | 212       | -                                | 182     | -                                |
| DEPARTMENT OF ENERGY.....                                 | 10,751       | -                                | 7,309     | -                                | 4,457   | -                                |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 36,606       | 12,777                           | 44,044    | 17,437                           | 41,497  | 17,736                           |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | 1,583        | 149                              | 2,063     | 682                              | 2,293   | 750                              |
| CENTER FOR DISEASE CONTROL.....                           | 1,489        | 1,464                            | 4,907     | 4,807                            | 4,114   | 4,014                            |
| FOOD AND DRUG ADMINISTRATION.....                         | 999          | 847                              | 1,401     | 1,346                            | 1,775   | 1,775                            |
| HEALTH SERVICES ADMINISTRATION.....                       | 858          | 868                              | 616       | 616                              | 850     | 850                              |
| HUMAN DEVELOPMENT SERVICES.....                           | 4,069        | 4,069                            | 830       | 830                              | 3,490   | 3,490                            |
| NATIONAL INSTITUTE OF EDUCATION.....                      | 153          | -                                | 200       | -                                | 250     | -                                |
| NATIONAL INSTITUTE OF HEALTH.....                         | 25,857       | 3,892                            | 29,967    | 5,196                            | 25,900  | 3,732                            |
| OFFICE OF EDUCATION.....                                  | 100          | -                                | 100       | -                                | 100     | -                                |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....         | 1,488        | 1,488                            | 3,960     | 3,960                            | 3,125   | 3,125                            |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                    | 1,107        | 1,056                            | 990       | 990                              | 1,000   | 1,000                            |
| BUREAU OF MINES.....                                      | 51           | -                                | -         | -                                | -       | -                                |
| OFFICE OF THE SECRETARY.....                              | 1,056        | 1,056                            | 990       | 990                              | 1,000   | 1,000                            |
| DEPARTMENT OF STATE, TOTAL.....                           | 5,765        | -                                | 17,881    | -                                | 20,629  | -                                |
| DEPARTMENTAL FUNDS.....                                   | 88           | -                                | 97        | -                                | 90      | -                                |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                 | 5,677        | -                                | 17,784    | -                                | 20,539  | -                                |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                  | 334          | -                                | -         | -                                | -       | -                                |
| OFFICE OF THE SECRETARY.....                              | 334          | -                                | -         | -                                | -       | -                                |
| OTHER AGENCIES                                            |              |                                  |           |                                  |         |                                  |
| ENVIRONMENTAL PROTECTION AGENCY.....                      | 6,028        | 4,826                            | 7,000     | 5,036                            | 6,000   | 4,900                            |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....        | 1,663        | -                                | 1,300     | -                                | 1,300   | -                                |
| NATIONAL SCIENCE FOUNDATION.....                          | 3,471        | 2,126                            | 4,269     | 2,757                            | 5,506   | 3,111                            |
| NUCLEAR REGULATORY COMMISSION.....                        | 892          | -                                | 737       | -                                | 1,022   | -                                |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....    | -            | -                                | 60        | -                                | 100     | -                                |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-97. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | ACTUAL, 1977 |                                  | ESTIMATES |                                  |        |                                  |
|-----------------------------------------------------------|--------------|----------------------------------|-----------|----------------------------------|--------|----------------------------------|
|                                                           | TOTAL        | SPECIAL FOREIGN CURRENCY PROGRAM | 1978      |                                  | 1979   |                                  |
|                                                           |              |                                  | TOTAL     | SPECIAL FOREIGN CURRENCY PROGRAM | TOTAL  | SPECIAL FOREIGN CURRENCY PROGRAM |
| TOTAL, ALL AGENCIES.....                                  | 17,423       | 8,194                            | 23,390    | 13,435                           | 24,383 | 13,934                           |
| DEPARTMENTS                                               |              |                                  |           |                                  |        |                                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                     | 2,990        | 2,607                            | 3,318     | 2,917                            | 3,303  | 2,904                            |
| SCIENCE AND EDUCATION ADMINISTRATION.....                 | 2,990        | 2,607                            | 3,318     | 2,917                            | 3,303  | 2,904                            |
| FEDERAL RESEARCH.....                                     | 2,990        | 2,607                            | 3,318     | 2,917                            | 3,303  | 2,904                            |
| DEPARTMENT OF COMMERCE, TOTAL.....                        | 82           | -                                | 60        | -                                | 95     | -                                |
| NATIONAL BUREAU OF STANDARDS.....                         | 82           | -                                | 60        | -                                | 95     | -                                |
| DEPARTMENT OF DEFENSE, TOTAL.....                         | 5,685        | 2,768                            | 7,655     | 4,592                            | 8,589  | 5,412                            |
| DEPARTMENT OF THE ARMY.....                               | 761          | -                                | 796       | -                                | 782    | -                                |
| DEPARTMENT OF THE NAVY.....                               | 3,941        | 2,768                            | 5,759     | 4,592                            | 6,657  | 5,412                            |
| DEPARTMENT OF THE AIR FORCE.....                          | 950          | -                                | 1,100     | -                                | 1,150  | -                                |
| DEFENSE AGENCIES.....                                     | 33           | -                                | -         | -                                | -      | -                                |
| DEPARTMENT OF ENERGY.....                                 | 12           | -                                | 18        | -                                | -      | -                                |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 4,053        | 1,265                            | 7,734     | 3,652                            | 6,655  | 3,094                            |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | 447          | 149                              | 952       | 692                              | 1,067  | 730                              |
| NATIONAL INSTITUTES OF HEALTH.....                        | 3,290        | -                                | 3,812     | -                                | 3,244  | -                                |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....         | 1,116        | 1,116                            | 2,970     | 2,970                            | 2,344  | 2,344                            |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                    | 600          | 600                              | 714       | 714                              | 1,000  | 1,000                            |
| OFFICE OF THE SECRETARY.....                              | 600          | 600                              | 714       | 714                              | 1,000  | 1,000                            |
| OTHER AGENCIES                                            |              |                                  |           |                                  |        |                                  |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....        | 902          | -                                | 819       | -                                | 820    | -                                |
| NATIONAL SCIENCE FOUNDATION.....                          | 2,299        | 954                              | 3,072     | 1,560                            | 3,919  | 1,524                            |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-98. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | ACTUAL, 1977 |                                  | ESTIMATES  |                                       |            |                                       |
|-----------------------------------------------------------|--------------|----------------------------------|------------|---------------------------------------|------------|---------------------------------------|
|                                                           | TOTAL        | SPECIAL FOREIGN CURRENCY PROGRAM | 1978 TOTAL | 1978 SPECIAL FOREIGN CURRENCY PROGRAM | 1979 TOTAL | 1979 SPECIAL FOREIGN CURRENCY PROGRAM |
| TOTAL, ALL AGENCIES.....                                  | 41,240       | 17,423                           | 53,266     | 21,652                                | 58,639     | 21,470                                |
| DEPARTMENTS                                               |              |                                  |            |                                       |            |                                       |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                     | 2,831        | 2,594                            | 4,382      | 4,134                                 | 3,690      | 3,441                                 |
| SCIENCE AND EDUCATION ADMINISTRATION.....                 | 2,831        | 2,594                            | 4,382      | 4,134                                 | 3,690      | 3,441                                 |
| FEDERAL RESEARCH.....                                     | 2,831        | 2,594                            | 4,382      | 4,134                                 | 3,690      | 3,441                                 |
| DEPARTMENT OF COMMERCE, TOTAL.....                        | 412          | -                                | 240        | -                                     | 166        | -                                     |
| NATIONAL BUREAU OF STANDARDS.....                         | 12           | -                                | 190        | -                                     | 80         | -                                     |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....      | 400          | -                                | 50         | -                                     | 86         | -                                     |
| DEPARTMENT OF DEFENSE, TOTAL.....                         | 1,630        | -                                | 1,407      | -                                     | 1,381      | -                                     |
| DEPARTMENT OF THE ARMY.....                               | 890          | -                                | 559        | -                                     | 788        | -                                     |
| DEPARTMENT OF THE NAVY.....                               | 30           | -                                | 35         | -                                     | 62         | -                                     |
| DEPARTMENT OF THE AIR FORCE.....                          | 553          | -                                | 601        | -                                     | 349        | -                                     |
| DEFENSE AGENCIES.....                                     | 157          | -                                | 212        | -                                     | 182        | -                                     |
| DEPARTMENT OF ENERGY.....                                 | 368          | -                                | 321        | -                                     | 357        | -                                     |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 25,769       | 11,512                           | 29,353     | 13,785                                | 28,842     | 14,642                                |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | 1,136        | -                                | 1,111      | -                                     | 1,226      | -                                     |
| CENTER FOR DISEASE CONTROL.....                           | 1,489        | 1,464                            | 4,907      | 4,807                                 | 4,114      | 4,014                                 |
| FOOD AND DRUG ADMINISTRATION.....                         | 999          | 847                              | 1,401      | 1,346                                 | 1,775      | 1,775                                 |
| HEALTH SERVICES ADMINISTRATION.....                       | 868          | 868                              | 616        | 616                                   | 850        | 850                                   |
| HUMAN DEVELOPMENT SERVICES.....                           | 4,069        | 4,069                            | 830        | 830                                   | 3,490      | 3,490                                 |
| NATIONAL INSTITUTES OF HEALTH.....                        | 16,736       | 3,892                            | 19,398     | 5,196                                 | 16,506     | 3,732                                 |
| OFFICE OF EDUCATION.....                                  | 100          | -                                | 100        | -                                     | 100        | -                                     |
| OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH.....         | 372          | 372                              | 990        | 990                                   | 781        | 781                                   |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                    | 456          | 456                              | 276        | 276                                   | -          | -                                     |
| OFFICE OF THE SECRETARY.....                              | 456          | 456                              | 276        | 276                                   | -          | -                                     |
| DEPARTMENT OF STATE, TOTAL.....                           | 4,456        | -                                | 11,512     | -                                     | 18,164     | -                                     |
| DEPARTMENTAL FUNDS.....                                   | 88           | -                                | 97         | -                                     | 90         | -                                     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                 | 4,368        | -                                | 11,415     | -                                     | 18,074     | -                                     |
| OTHER AGENCIES                                            |              |                                  |            |                                       |            |                                       |
| ENVIRONMENTAL PROTECTION AGENCY.....                      | 2,713        | 1,689                            | 3,150      | 2,260                                 | 2,700      | 1,800                                 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....        | 561          | -                                | 431        | -                                     | 430        | -                                     |
| NATIONAL SCIENCE FOUNDATION.....                          | 1,172        | 1,172                            | 1,197      | 1,197                                 | 1,387      | 1,587                                 |
| NUCLEAR REGULATORY COMMISSION.....                        | 892          | -                                | 737        | -                                     | 1,022      | -                                     |
| UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY.....    | -            | -                                | 60         | -                                     | 100        | -                                     |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-99. FEDERAL OBLIGATIONS FOR DEVELOPMENT TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                                   | ACTUAL, 1977 |                                           | ESTIMATES |                                           |        |                                           |
|----------------------------------------------------------|--------------|-------------------------------------------|-----------|-------------------------------------------|--------|-------------------------------------------|
|                                                          | TOTAL        | SPECIAL<br>FOREIGN<br>CURRENCY<br>PROGRAM | 1978      |                                           | 1979   |                                           |
|                                                          |              |                                           | TOTAL     | SPECIAL<br>FOREIGN<br>CURRENCY<br>PROGRAM | TOTAL  | SPECIAL<br>FOREIGN<br>CURRENCY<br>PROGRAM |
| TOTAL, ALL AGENCIES.....                                 | 29,522       | 3,296                                     | 47,375    | 3,019                                     | 40,838 | 2,405                                     |
| DEPARTMENTS                                              |              |                                           |           |                                           |        |                                           |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                    | 159          | 159                                       | 243       | 243                                       | 205    | 205                                       |
| SCIENCE AND EDUCATION ADMINISTRATION.....                | 159          | 159                                       | 243       | 243                                       | 205    | 205                                       |
| FEDERAL RESEARCH.....                                    | 159          | 159                                       | 243       | 243                                       | 205    | 205                                       |
| DEPARTMENT OF DEFENSE, TOTAL.....                        | 7,779        | -                                         | 23,136    | -                                         | 24,718 | -                                         |
| DEPARTMENT OF THE ARMY.....                              | 323          | -                                         | 3,469     | -                                         | 225    | -                                         |
| DEPARTMENT OF THE NAVY.....                              | 3,762        | -                                         | 5,644     | -                                         | 5,289  | -                                         |
| DEPARTMENT OF THE AIR FORCE.....                         | 3,694        | -                                         | 14,023    | -                                         | 19,204 | -                                         |
| DEPARTMENT OF ENERGY.....                                | 10,371       | -                                         | 6,770     | -                                         | 4,100  | -                                         |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL..... | 5,984        | -                                         | 6,957     | -                                         | 6,000  | -                                         |
| NATIONAL INSTITUTE OF EDUCATION.....                     | 153          | -                                         | 200       | -                                         | 250    | -                                         |
| NATIONAL INSTITUTES OF HEALTH.....                       | 5,831        | -                                         | 6,757     | -                                         | 5,750  | -                                         |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                   | 51           | -                                         | -         | -                                         | -      | -                                         |
| BUREAU OF MINES.....                                     | 51           | -                                         | -         | -                                         | -      | -                                         |
| DEPARTMENT OF STATE, TOTAL.....                          | 1,309        | -                                         | 6,369     | -                                         | 2,465  | -                                         |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                | 1,309        | -                                         | 6,369     | -                                         | 2,465  | -                                         |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                 | 334          | -                                         | -         | -                                         | -      | -                                         |
| OFFICE OF THE SECRETARY.....                             | 334          | -                                         | -         | -                                         | -      | -                                         |
| OTHER AGENCIES                                           |              |                                           |           |                                           |        |                                           |
| ENVIRONMENTAL PROTECTION AGENCY.....                     | 3,315        | 3,137                                     | 3,850     | 2,776                                     | 3,300  | 2,200                                     |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....       | 220          | -                                         | 50        | -                                         | 50     | -                                         |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-100. FEDERAL OBLIGATIONS FOR RESEARCH, DEVELOPMENT, AND RED PLANT, BY GEOGRAPHIC DIVISION AND STATE: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| GEOGRAPHIC DIVISION AND STATE | RESEARCH,<br>DEVELOPMENT<br>AND RED PLANT | RESEARCH AND<br>DEVELOPMENT | RED PLANT |
|-------------------------------|-------------------------------------------|-----------------------------|-----------|
| TOTAL, ALL STATES.....        | 24,677,782                                | 23,343,776                  | 1,334,006 |
| NEW ENGLAND.....              | 1,999,047                                 | 1,962,969                   | 36,078    |
| CONNECTICUT.....              | 295,646                                   | 291,703                     | 3,943     |
| MAINE.....                    | 18,082                                    | 18,032                      | 50        |
| MASSACHUSETTS.....            | 1,498,802                                 | 1,474,411                   | 24,391    |
| NEW HAMPSHIRE.....            | 34,911                                    | 32,479                      | 2,432     |
| RHODE ISLAND.....             | 115,197                                   | 109,935                     | 5,262     |
| VERMONT.....                  | 36,409                                    | 36,409                      | -         |
| MIDDLE ATLANTIC.....          | 2,740,441                                 | 2,606,514                   | 133,927   |
| NEW JERSEY.....               | 631,033                                   | 566,216                     | 64,817    |
| NEW YORK.....                 | 1,263,807                                 | 1,202,810                   | 60,997    |
| PENNSYLVANIA.....             | 845,601                                   | 837,488                     | 8,113     |
| EAST NORTH CENTRAL.....       | 1,838,578                                 | 1,724,014                   | 114,564   |
| ILLINOIS.....                 | 568,679                                   | 516,958                     | 52,021    |
| INDIANA.....                  | 103,294                                   | 102,728                     | 570       |
| MICHIGAN.....                 | 316,453                                   | 315,402                     | 1,051     |
| OHIO.....                     | 754,839                                   | 694,449                     | 60,390    |
| WISCONSIN.....                | 95,009                                    | 94,477                      | 532       |
| WEST NORTH CENTRAL.....       | 974,763                                   | 971,175                     | 3,588     |
| IOWA.....                     | 60,508                                    | 59,448                      | 1,460     |
| KANSAS.....                   | 36,287                                    | 36,226                      | 61        |
| MINNESOTA.....                | 186,616                                   | 186,233                     | 383       |
| MISSOURI.....                 | 639,313                                   | 638,441                     | 872       |
| NEBRASKA.....                 | 24,293                                    | 24,096                      | 197       |
| NORTH DAKOTA.....             | 19,356                                    | 18,745                      | 611       |
| SOUTH DAKOTA.....             | 7,990                                     | 7,986                       | 4         |
| SOUTH ATLANTIC.....           | 5,233,884                                 | 4,875,386                   | 358,498   |
| DELAWARE.....                 | 15,282                                    | 15,271                      | 11        |
| DISTRICT OF COLUMBIA.....     | 740,875                                   | 729,551                     | 11,324    |
| FLORIDA.....                  | 1,074,278                                 | 919,052                     | 155,226   |
| GEORGIA.....                  | 112,001                                   | 110,825                     | 1,176     |
| MARYLAND.....                 | 2,110,575                                 | 2,030,185                   | 80,390    |
| NORTH CAROLINA.....           | 221,444                                   | 154,682                     | 66,762    |
| SOUTH CAROLINA.....           | 69,215                                    | 66,997                      | 2,218     |
| VIRGINIA.....                 | 823,698                                   | 799,166                     | 24,732    |
| WEST VIRGINIA.....            | 66,316                                    | 49,657                      | 16,659    |
| EAST SOUTH CENTRAL.....       | 1,185,719                                 | 1,131,040                   | 54,679    |
| ALABAMA.....                  | 438,951                                   | 433,614                     | 5,337     |
| KENTUCKY.....                 | 56,224                                    | 56,224                      | -         |
| MISSISSIPPI.....              | 106,703                                   | 95,168                      | 11,535    |
| TENNESSEE.....                | 583,841                                   | 546,034                     | 37,807    |
| WEST SOUTH CENTRAL.....       | 1,142,175                                 | 1,124,937                   | 17,238    |
| ARKANSAS.....                 | 27,108                                    | 24,315                      | 2,793     |
| LOUISIANA.....                | 159,982                                   | 156,357                     | 3,625     |
| OKLAHOMA.....                 | 48,134                                    | 47,749                      | 385       |
| TEXAS.....                    | 906,951                                   | 896,516                     | 10,435    |
| MOUNTAIN.....                 | 1,914,754                                 | 1,719,182                   | 195,572   |
| ARIZONA.....                  | 143,400                                   | 141,850                     | 1,550     |
| COLORADO.....                 | 335,236                                   | 322,537                     | 12,699    |
| IDAHO.....                    | 144,813                                   | 118,740                     | 26,073    |
| MONTANA.....                  | 46,289                                    | 45,471                      | 818       |
| NEVADA.....                   | 198,278                                   | 183,520                     | 14,758    |
| NEW MEXICO.....               | 888,781                                   | 750,865                     | 137,916   |
| UTAH.....                     | 133,826                                   | 132,324                     | 1,502     |
| WYOMING.....                  | 24,131                                    | 23,875                      | 256       |
| PACIFIC.....                  | 7,560,026                                 | 7,142,218                   | 417,808   |
| ALASKA.....                   | 36,428                                    | 35,808                      | 620       |
| CALIFORNIA.....               | 6,409,842                                 | 6,106,557                   | 303,285   |
| HAWAII.....                   | 37,398                                    | 36,914                      | 484       |
| OREGON.....                   | 84,353                                    | 84,320                      | 33        |
| WASHINGTON.....               | 952,005                                   | 878,619                     | 113,386   |
| OUTLYING AREAS.....           | 47,852                                    | 47,717                      | 135       |
| OFFICES ABROAD.....           | 40,543                                    | 38,624                      | 1,919     |

NOTE: THE OBLIGATIONS OF THE TEN MAJOR AND SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&D AND RED PLANT OBLIGATIONS IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-101. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY STATE AND PERFORMER: FISCAL YEAR 1977  
(THOUSANDS OF DOLLARS)

| STATE (IN ORDER OF TOTAL<br>FEDERAL R&D OBLIGATIONS) | TOTAL      | FEDERAL<br>INTRA-<br>MURAL (1) | EXTRAMURAL          |                                           |                                   |                                             |                                           |                                                      | STATE AND<br>LOCAL<br>GOVTS |
|------------------------------------------------------|------------|--------------------------------|---------------------|-------------------------------------------|-----------------------------------|---------------------------------------------|-------------------------------------------|------------------------------------------------------|-----------------------------|
|                                                      |            |                                | INDUSTRIAL<br>FIRMS | FFRDCS<br>ADMIN BY<br>INDUSTRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NONPROFIT<br>INSTITU-<br>TIONS |                             |
| TOTAL, ALL STATES.....                               | 23,343,776 | 5,921,901                      | 11,084,451          | 1,053,504                                 | 2,833,972                         | 1,304,569                                   | 692,316                                   | 256,144                                              | 196,919                     |
| CALIFORNIA.....                                      | 6,106,557  | 703,544                        | 4,231,097           | 71,655                                    | 406,641                           | 452,750                                     | 104,889                                   | 99,110                                               | 36,863                      |
| MARYLAND.....                                        | 2,030,163  | 1,203,876                      | 495,967             | 23,284                                    | 89,645                            | 124,517                                     | 8,955                                     | -                                                    | 3,941                       |
| MASSACHUSETTS.....                                   | 1,474,411  | 192,567                        | 731,126             | -                                         | 285,102                           | 65,062                                      | 151,188                                   | 42,634                                               | 6,730                       |
| NEW YORK.....                                        | 1,202,810  | 91,767                         | 459,110             | 133,310                                   | 308,891                           | 98,559                                      | 82,892                                    | -                                                    | 26,273                      |
| FLORIDA.....                                         | 919,052    | 430,456                        | 422,253             | -                                         | 55,766                            | -                                           | 3,038                                     | -                                                    | 7,539                       |
| TEXAS.....                                           | 896,516    | 435,992                        | 494,852             | -                                         | 140,955                           | -                                           | 18,752                                    | -                                                    | 5,965                       |
| WASHINGTON.....                                      | 878,619    | 44,290                         | 525,072             | 148,351                                   | 72,845                            | -                                           | 13,709                                    | 66,312                                               | 6,040                       |
| PENNSYLVANIA.....                                    | 837,488    | 170,962                        | 313,055             | 157,422                                   | 116,520                           | 13,431                                      | 41,999                                    | -                                                    | 4,099                       |
| VIRGINIA.....                                        | 799,166    | 365,022                        | 333,610             | -                                         | 42,024                            | 831                                         | 8,348                                     | 43,840                                               | 5,985                       |
| NEW MEXICO.....                                      | 750,805    | 190,974                        | 62,681              | 239,176                                   | 18,850                            | 230,649                                     | 7,795                                     | -                                                    | 740                         |
| DISTRICT OF COLUMBIA.....                            | 729,551    | 474,804                        | 141,377             | -                                         | 68,971                            | 704                                         | 40,458                                    | 50                                                   | 3,167                       |
| OHIO.....                                            | 694,449    | 319,306                        | 262,611             | 9,098                                     | 70,944                            | -                                           | 27,556                                    | -                                                    | 6,934                       |
| MISSOURI.....                                        | 638,441    | 23,690                         | 535,252             | -                                         | 59,848                            | -                                           | 14,132                                    | 102                                                  | 5,417                       |
| NEW JERSEY.....                                      | 566,210    | 208,369                        | 270,271             | -                                         | 37,348                            | 40,262                                      | 4,681                                     | -                                                    | 5,285                       |
| TENNESSEE.....                                       | 546,034    | 21,110                         | 308,033             | 162,137                                   | 44,563                            | 3,672                                       | 5,499                                     | -                                                    | 1,040                       |
| ILLINOIS.....                                        | 516,958    | 56,586                         | 102,163             | -                                         | 125,515                           | 196,975                                     | 30,607                                    | -                                                    | 5,112                       |
| ALABAMA.....                                         | 433,614    | 272,765                        | 121,833             | -                                         | 30,529                            | -                                           | 7,609                                     | -                                                    | 878                         |
| COLORADO.....                                        | 322,537    | 106,159                        | 120,178             | 470                                       | 54,872                            | 21,022                                      | 10,447                                    | 3,578                                                | 6,611                       |
| MICHIGAN.....                                        | 315,602    | 32,716                         | 179,156             | -                                         | 84,519                            | -                                           | 14,357                                    | -                                                    | 4,634                       |
| CONNECTICUT.....                                     | 291,703    | 12,166                         | 205,870             | 4,500                                     | 62,086                            | -                                           | 3,727                                     | -                                                    | 3,334                       |
| MINNESOTA.....                                       | 186,233    | 17,424                         | 93,856              | -                                         | 48,947                            | -                                           | 21,498                                    | -                                                    | 4,508                       |
| NEVADA.....                                          | 183,520    | 43,235                         | 126,745             | 2,290                                     | 3,744                             | 1,466                                       | 5,390                                     | -                                                    | 646                         |
| LOUISIANA.....                                       | 156,357    | 27,010                         | 101,100             | -                                         | 20,981                            | -                                           | 2,279                                     | -                                                    | 4,987                       |
| NORTH CAROLINA.....                                  | 156,062    | 57,278                         | 8,760               | -                                         | 70,692                            | -                                           | 17,011                                    | -                                                    | 921                         |
| ARIZONA.....                                         | 141,050    | 39,396                         | 65,028              | -                                         | 26,118                            | 8,700                                       | 1,007                                     | -                                                    | 1,601                       |
| UTAH.....                                            | 132,324    | 25,266                         | 73,910              | -                                         | 30,907                            | -                                           | 1,161                                     | -                                                    | 1,060                       |
| IDAHO.....                                           | 118,760    | 8,437                          | 7,166               | 76,424                                    | 5,943                             | 19,207                                      | 439                                       | -                                                    | 1,124                       |
| GEORGIA.....                                         | 110,845    | 47,099                         | 15,423              | 2,153                                     | 40,058                            | -                                           | 3,197                                     | -                                                    | 2,895                       |
| RHODE ISLAND.....                                    | 109,935    | 72,615                         | 15,968              | -                                         | 17,662                            | -                                           | 2,833                                     | -                                                    | 845                         |
| INDIANA.....                                         | 102,728    | 23,343                         | 28,156              | -                                         | 40,040                            | 640                                         | 1,086                                     | -                                                    | 1,463                       |
| MISSISSIPPI.....                                     | 95,108     | 60,149                         | 22,824              | -                                         | 11,377                            | -                                           | 458                                       | -                                                    | 360                         |
| WISCONSIN.....                                       | 94,477     | 15,137                         | 5,677               | -                                         | 71,016                            | -                                           | 1,565                                     | -                                                    | 1,082                       |
| OREGON.....                                          | 84,340     | 28,923                         | 4,592               | -                                         | 38,606                            | -                                           | 9,938                                     | -                                                    | 2,261                       |
| SOUTH CAROLINA.....                                  | 86,997     | 11,373                         | 16,962              | 23,189                                    | 13,626                            | -                                           | 240                                       | -                                                    | 1,607                       |
| IOWA.....                                            | 59,498     | 10,431                         | 8,001               | -                                         | 29,040                            | 11,457                                      | 19                                        | -                                                    | 500                         |
| KENTUCKY.....                                        | 56,244     | 11,255                         | 22,604              | 37                                        | 14,527                            | -                                           | 2,268                                     | -                                                    | 5,333                       |
| WEST VIRGINIA.....                                   | 49,657     | 20,292                         | 12,692              | -                                         | 5,154                             | 7,267                                       | 1,355                                     | -                                                    | 2,897                       |
| OKLAHOMA.....                                        | 47,749     | 21,060                         | 7,700               | -                                         | 13,999                            | -                                           | 3,236                                     | -                                                    | 1,754                       |
| MONTANA.....                                         | 45,471     | 14,781                         | 23,977              | -                                         | 5,181                             | -                                           | 112                                       | -                                                    | 1,420                       |
| HAWAII.....                                          | 36,914     | 6,706                          | 9,041               | -                                         | 19,081                            | -                                           | 1,735                                     | -                                                    | 351                         |
| VERMONT.....                                         | 36,409     | 903                            | 24,297              | -                                         | 9,922                             | -                                           | 594                                       | -                                                    | 693                         |
| KANSAS.....                                          | 36,226     | 4,578                          | 10,341              | -                                         | 18,790                            | -                                           | 780                                       | -                                                    | 1,737                       |
| ALASKA.....                                          | 35,608     | 22,283                         | 1,172               | -                                         | 9,991                             | -                                           | 182                                       | -                                                    | 2,160                       |
| NEW HAMPSHIRE.....                                   | 32,479     | 7,538                          | 12,557              | -                                         | 11,015                            | -                                           | 589                                       | -                                                    | 760                         |
| ARKANSAS.....                                        | 24,319     | 15,594                         | 536                 | -                                         | 7,535                             | -                                           | 156                                       | -                                                    | 494                         |
| NEBRASKA.....                                        | 24,096     | 7,440                          | 3,024               | -                                         | 13,031                            | -                                           | 100                                       | -                                                    | 501                         |
| WYOMING.....                                         | 23,075     | 14,471                         | 3,759               | -                                         | 5,290                             | -                                           | -                                         | -                                                    | 355                         |
| NORTH DAKOTA.....                                    | 18,745     | 11,206                         | 2,662               | -                                         | 3,934                             | -                                           | 506                                       | -                                                    | 417                         |
| MAINE.....                                           | 18,032     | 2,105                          | 4,772               | -                                         | 4,797                             | -                                           | 4,623                                     | -                                                    | 1,735                       |
| DELAWARE.....                                        | 15,271     | 774                            | 7,267               | -                                         | 6,610                             | -                                           | 385                                       | -                                                    | 215                         |
| SOUTH DAKOTA.....                                    | 7,966      | 2,111                          | 2,132               | -                                         | 2,918                             | -                                           | 256                                       | -                                                    | 565                         |
| OUTLYING AREAS.....                                  | 47,717     | 9,820                          | 23,665              | -                                         | 8,586                             | 3,898                                       | 480                                       | -                                                    | 1,250                       |
| OFFICES ABROAD.....                                  | 38,624     | 24,707                         | 2,254               | -                                         | 422                               | 3,500                                       | 7,200                                     | 510                                                  | 31                          |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

NOTE: THE OBLIGATIONS OF THE TEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&D OBLIGATIONS IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-101A. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO EACH PERFORMER, BY STATE: FISCAL YEAR 1977

| STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS) | TOTAL  | FEDERAL INTRAMURAL(1) | EXTRAMURAL       |                                  |                           |                                    |                               |                                        | STATE AND LOCAL GOVTS |
|---------------------------------------------------|--------|-----------------------|------------------|----------------------------------|---------------------------|------------------------------------|-------------------------------|----------------------------------------|-----------------------|
|                                                   |        |                       | INDUSTRIAL FIRMS | FFRDCS ADMIN BY INDUSTRIAL FIRMS | UNIVERSITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTITUTIONS | FFRDCS ADMIN BY NONPROFIT INSTITUTIONS |                       |
| TOTAL, ALL STATES.....                            | 100.0% | 100.0%                | 100.0%           | 100.0%                           | 100.0%                    | 100.0%                             | 100.0%                        | 100.0%                                 | 100.0%                |
| CALIFORNIA.....                                   | 26.2   | 11.9                  | 38.2             | 6.8                              | 14.3                      | 34.7                               | 15.2                          | 38.7                                   | 18.7                  |
| MARYLAND.....                                     | 8.7    | 21.7                  | 4.5              | 2.2                              | 3.2                       | 9.5                                | 1.3                           | -                                      | 2.0                   |
| MASSACHUSETTS.....                                | 6.3    | 3.3                   | 6.6              | -                                | 10.1                      | 5.0                                | 21.8                          | 16.6                                   | 3.4                   |
| NEW YORK.....                                     | 5.2    | 1.5                   | 4.1              | 12.7                             | 10.9                      | 7.6                                | 12.0                          | -                                      | 14.4                  |
| FLORIDA.....                                      | 3.9    | 7.3                   | 3.8              | -                                | 2.0                       | -                                  | .4                            | -                                      | 3.8                   |
| TEXAS.....                                        | 3.8    | 4.0                   | 4.5              | -                                | 5.0                       | -                                  | 2.7                           | -                                      | 3.0                   |
| WASHINGTON.....                                   | 3.8    | .7                    | 4.7              | 14.1                             | 2.6                       | -                                  | 2.0                           | 25.9                                   | 4.1                   |
| PENNSYLVANIA.....                                 | 3.6    | 2.9                   | 2.8              | 14.9                             | 4.8                       | 1.0                                | 6.1                           | -                                      | 2.1                   |
| VIRGINIA.....                                     | 3.4    | 6.2                   | 3.0              | -                                | 1.5                       | .1                                 | 1.2                           | 17.1                                   | 2.8                   |
| NEW MEXICO.....                                   | 3.2    | 3.2                   | .6               | 22.7                             | .7                        | 17.7                               | 1.1                           | -                                      | .4                    |
| DISTRICT OF COLUMBIA.....                         | 3.1    | 8.0                   | 1.3              | -                                | 2.4                       | .1                                 | 5.8                           | 9                                      | 1.6                   |
| OHIO.....                                         | 3.0    | 5.4                   | 2.4              | .9                               | 2.5                       | -                                  | 4.0                           | -                                      | 2.5                   |
| MISSOURI.....                                     | 2.7    | .4                    | 4.8              | -                                | 2.1                       | -                                  | 2.0                           | 9                                      | 2.8                   |
| NEW JERSEY.....                                   | 2.4    | 3.5                   | 2.4              | -                                | 1.3                       | 3.1                                | .7                            | -                                      | 2.7                   |
| TENNESSEE.....                                    | 2.3    | .4                    | 2.8              | 15.4                             | 1.6                       | .3                                 | .8                            | -                                      | .5                    |
| ILLINOIS.....                                     | 2.2    | 1.0                   | .9               | -                                | 4.4                       | 15.1                               | 4.4                           | -                                      | 2.4                   |
| ALABAMA.....                                      | 1.9    | 4.6                   | 1.1              | -                                | 1.1                       | -                                  | 1.1                           | -                                      | .4                    |
| COLORADO.....                                     | 1.4    | 1.8                   | 1.1              | 9                                | 1.9                       | 1.6                                | 1.4                           | 1.4                                    | 3.5                   |
| MICHIGAN.....                                     | 1.4    | .6                    | 1.6              | -                                | 3.0                       | -                                  | 2.1                           | -                                      | 2.4                   |
| CONNECTICUT.....                                  | 1.2    | .2                    | 1.9              | .4                               | 2.2                       | -                                  | .5                            | -                                      | 1.7                   |
| MINNESOTA.....                                    | .8     | .3                    | .8               | -                                | 1.7                       | -                                  | 3.1                           | -                                      | 2.3                   |
| NEVADA.....                                       | .8     | .7                    | 1.1              | .2                               | .1                        | .1                                 | .8                            | -                                      | .3                    |
| LOUISIANA.....                                    | .7     | .5                    | .9               | -                                | .7                        | -                                  | .3                            | -                                      | 2.5                   |
| NORTH CAROLINA.....                               | .7     | 1.0                   | .1               | -                                | 2.5                       | -                                  | 2.5                           | -                                      | .5                    |
| ARIZONA.....                                      | .6     | .7                    | .6               | -                                | .9                        | .7                                 | .1                            | -                                      | .8                    |
| UTAH.....                                         | .6     | .4                    | .7               | -                                | 1.1                       | -                                  | .2                            | -                                      | .5                    |
| IDAHO.....                                        | .5     | .1                    | .1               | 7.3                              | .2                        | 1.5                                | .1                            | -                                      | .6                    |
| GEORGIA.....                                      | .5     | .8                    | .1               | .2                               | 1.4                       | -                                  | .5                            | -                                      | 1.5                   |
| RHODE ISLAND.....                                 | .5     | 1.2                   | .1               | -                                | .6                        | -                                  | .4                            | -                                      | .4                    |
| INDIANA.....                                      | .4     | .4                    | .3               | -                                | 1.7                       | 9                                  | .2                            | -                                      | .7                    |
| MISSISSIPPI.....                                  | .4     | 1.0                   | .2               | -                                | .4                        | -                                  | .1                            | -                                      | .2                    |
| WISCONSIN.....                                    | .4     | .3                    | .1               | -                                | 2.5                       | -                                  | .2                            | -                                      | .5                    |
| OREGON.....                                       | .4     | .5                    | 9                | -                                | 1.4                       | -                                  | 1.4                           | -                                      | 1.1                   |
| SOUTH CAROLINA.....                               | .3     | .2                    | .2               | 2.2                              | .5                        | -                                  | 9                             | -                                      | .8                    |
| IOWA.....                                         | .3     | .2                    | .1               | -                                | 1.0                       | .9                                 | 9                             | -                                      | .3                    |
| KENTUCKY.....                                     | .4     | .2                    | .2               | 9                                | .5                        | -                                  | .3                            | -                                      | 2.7                   |
| WEST VIRGINIA.....                                | .2     | .3                    | .1               | -                                | .2                        | .6                                 | .2                            | -                                      | 1.5                   |
| OKLAHOMA.....                                     | .2     | .4                    | .1               | -                                | .5                        | -                                  | .5                            | -                                      | .9                    |
| MONTANA.....                                      | .2     | .2                    | .2               | -                                | .2                        | -                                  | 9                             | -                                      | .7                    |
| HAWAII.....                                       | .2     | .1                    | .1               | -                                | .7                        | -                                  | .3                            | -                                      | .2                    |
| VERMONT.....                                      | .2     | 9                     | .2               | -                                | .4                        | -                                  | .1                            | -                                      | .4                    |
| KANSAS.....                                       | .2     | .1                    | .1               | -                                | .7                        | -                                  | .1                            | -                                      | .9                    |
| ALASKA.....                                       | .4     | .4                    | 9                | -                                | .4                        | -                                  | 9                             | -                                      | 1.1                   |
| NEW HAMPSHIRE.....                                | .1     | .1                    | .1               | -                                | .4                        | -                                  | .1                            | -                                      | .4                    |
| ARKANSAS.....                                     | .1     | .3                    | 9                | -                                | .3                        | -                                  | 9                             | -                                      | .3                    |
| NEBRASKA.....                                     | .1     | .1                    | 9                | -                                | .5                        | -                                  | 9                             | -                                      | .3                    |
| WYOMING.....                                      | .1     | .2                    | 9                | -                                | .2                        | -                                  | -                             | -                                      | .2                    |
| NORTH DAKOTA.....                                 | .4     | .2                    | 9                | -                                | .1                        | -                                  | .1                            | -                                      | .2                    |
| MAINE.....                                        | .1     | 9                     | 9                | -                                | .2                        | -                                  | .7                            | -                                      | .9                    |
| DELAWARE.....                                     | .1     | 9                     | .1               | -                                | .2                        | -                                  | .1                            | -                                      | .1                    |
| SOUTH DAKOTA.....                                 | 9      | 9                     | 9                | -                                | .1                        | -                                  | 9                             | -                                      | .3                    |
| OUTLYING AREAS.....                               | .2     | .2                    | .2               | -                                | .3                        | .3                                 | .1                            | -                                      | .6                    |
| OFFICES ABROAD.....                               | .2     | .4                    | 9                | -                                | 9                         | .3                                 | 1.0                           | .2                                     | 9                     |

\* PERCENTAGE LESS THAN .05%.

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-101B. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO EACH STATE, BY PERFORMER: FISCAL YEAR 1977

| STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS) | TOTAL | FEDERAL INTRAMURAL (1) | EXTRAMURAL       |                                  |                           |                                    |                               |                                        | STATE AND LOCAL GOVTS |
|---------------------------------------------------|-------|------------------------|------------------|----------------------------------|---------------------------|------------------------------------|-------------------------------|----------------------------------------|-----------------------|
|                                                   |       |                        | INDUSTRIAL FIRMS | FFRDCS ADMIN BY INDUSTRIAL FIRMS | UNIVERSITIES AND COLLEGES | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NON-PROFIT INSTITUTIONS | FFRDCS ADMIN BY NONPROFIT INSTITUTIONS |                       |
| TOTAL, ALL STATES.....                            | 100.0 | 25.4                   | 47.5             | 4.5                              | 12.1                      | 5.6                                | 3.0                           | 1.1                                    | 0.8                   |
| CALIFORNIA.....                                   | 100.0 | 11.5                   | 69.3             | 1.2                              | 6.7                       | 7.4                                | 1.7                           | 1.6                                    | .6                    |
| MARYLAND.....                                     | 100.0 | 63.2                   | 24.4             | 1.1                              | 4.4                       | 6.1                                | .4                            | -                                      | .2                    |
| MASSACHUSETTS.....                                | 100.0 | 13.1                   | 49.6             | -                                | 19.3                      | 4.4                                | 10.3                          | 2.9                                    | .5                    |
| NEW YORK.....                                     | 100.0 | 7.6                    | 38.2             | 11.1                             | 25.7                      | 8.2                                | 6.9                           | -                                      | 2.4                   |
| FLORIDA.....                                      | 100.0 | 46.8                   | 45.9             | -                                | 6.1                       | -                                  | .3                            | -                                      | .8                    |
| TEXAS.....                                        | 100.0 | 26.3                   | 55.2             | -                                | 15.7                      | -                                  | 2.1                           | -                                      | .7                    |
| WASHINGTON.....                                   | 100.0 | 5.0                    | 59.8             | 16.9                             | 8.3                       | -                                  | 1.6                           | 7.5                                    | .9                    |
| PENNSYLVANIA.....                                 | 100.0 | 20.4                   | 37.4             | 18.8                             | 16.3                      | 1.6                                | 5.0                           | -                                      | .5                    |
| VIRGINIA.....                                     | 100.0 | 45.7                   | 41.7             | -                                | 5.3                       | .1                                 | 1.0                           | 5.5                                    | .7                    |
| NEW MEXICO.....                                   | 100.0 | 25.4                   | 8.3              | 31.9                             | 2.5                       | 30.7                               | 1.0                           | -                                      | .1                    |
| DISTRICT OF COLUMBIA.....                         | 100.0 | 65.1                   | 19.4             | -                                | 9.5                       | .1                                 | 5.5                           | *                                      | .4                    |
| OHIO.....                                         | 100.0 | 46.0                   | 37.8             | 1.3                              | 10.2                      | -                                  | 4.0                           | -                                      | .7                    |
| MISSOURI.....                                     | 100.0 | 3.7                    | 83.8             | -                                | 9.4                       | -                                  | 2.2                           | *                                      | .8                    |
| NEW JERSEY.....                                   | 100.0 | 36.8                   | 47.7             | -                                | 6.6                       | 7.1                                | .8                            | -                                      | .9                    |
| TENNESSEE.....                                    | 100.0 | 3.9                    | 56.4             | 29.7                             | 8.2                       | .7                                 | 1.0                           | -                                      | .2                    |
| ILLINOIS.....                                     | 100.0 | 10.9                   | 19.8             | -                                | 24.3                      | 38.1                               | 5.9                           | -                                      | 1.0                   |
| ALABAMA.....                                      | 100.0 | 62.9                   | 28.1             | -                                | 7.0                       | -                                  | 1.8                           | -                                      | .2                    |
| COLORADO.....                                     | 100.0 | 32.9                   | 37.3             | .1                               | 17.0                      | 6.5                                | 2.9                           | 1.1                                    | 2.1                   |
| MICHIGAN.....                                     | 100.0 | 10.4                   | 56.8             | -                                | 26.8                      | -                                  | 4.6                           | -                                      | 1.5                   |
| CONNECTICUT.....                                  | 100.0 | 4.2                    | 70.6             | 1.5                              | 21.3                      | -                                  | 1.3                           | -                                      | 1.1                   |
| MINNESOTA.....                                    | 100.0 | 9.4                    | 50.4             | -                                | 26.3                      | -                                  | 11.5                          | -                                      | 2.4                   |
| NEVADA.....                                       | 100.0 | 23.6                   | 69.1             | 1.2                              | 2.0                       | .8                                 | 2.9                           | -                                      | .4                    |
| LOUISIANA.....                                    | 100.0 | 17.3                   | 64.7             | -                                | 13.4                      | -                                  | 1.3                           | -                                      | 3.2                   |
| NORTH CAROLINA.....                               | 100.0 | 37.0                   | 5.7              | -                                | 45.7                      | -                                  | 11.0                          | -                                      | .6                    |
| ARIZONA.....                                      | 100.0 | 27.8                   | 45.8             | -                                | 18.4                      | 4.1                                | .7                            | -                                      | 1.1                   |
| UTAH.....                                         | 100.0 | 19.1                   | 55.9             | -                                | 23.4                      | -                                  | .9                            | -                                      | .8                    |
| IDAHO.....                                        | 100.0 | 7.1                    | 6.0              | 44.4                             | 5.0                       | 16.2                               | .4                            | -                                      | .9                    |
| GEORGIA.....                                      | 100.0 | 42.5                   | 13.9             | 1.9                              | 36.1                      | -                                  | 2.9                           | -                                      | 2.6                   |
| RHODE ISLAND.....                                 | 100.0 | 66.1                   | 14.5             | -                                | 16.1                      | -                                  | 2.6                           | -                                      | .8                    |
| INDIANA.....                                      | 100.0 | 22.7                   | 27.4             | -                                | 46.8                      | .6                                 | 1.1                           | -                                      | 1.4                   |
| MISSISSIPPI.....                                  | 100.0 | 63.2                   | 24.0             | -                                | 12.0                      | -                                  | .5                            | -                                      | .4                    |
| WISCONSIN.....                                    | 100.0 | 16.0                   | 6.0              | -                                | 75.2                      | -                                  | 1.7                           | -                                      | 1.1                   |
| OREGON.....                                       | 100.0 | 34.3                   | 5.4              | -                                | 45.8                      | -                                  | 11.8                          | -                                      | 2.7                   |
| SOUTH CAROLINA.....                               | 100.0 | 17.0                   | 25.3             | 34.6                             | 20.3                      | -                                  | .4                            | -                                      | 2.4                   |
| IOWA.....                                         | 100.0 | 17.5                   | 13.5             | -                                | 46.8                      | 19.3                               | .8                            | -                                      | .8                    |
| KENTUCKY.....                                     | 100.0 | 20.0                   | 40.6             | .1                               | 25.8                      | -                                  | 4.0                           | -                                      | 9.5                   |
| WEST VIRGINIA.....                                | 100.0 | 40.9                   | 25.6             | -                                | 10.4                      | 14.6                               | 2.7                           | -                                      | 5.8                   |
| OKLAHOMA.....                                     | 100.0 | 44.1                   | 16.1             | -                                | 29.3                      | -                                  | 6.8                           | -                                      | 3.7                   |
| MONTANA.....                                      | 100.0 | 32.5                   | 52.7             | -                                | 11.4                      | -                                  | .2                            | -                                      | 3.1                   |
| HAWAII.....                                       | 100.0 | 18.2                   | 24.5             | -                                | 51.7                      | -                                  | 4.7                           | -                                      | 1.0                   |
| VERMONT.....                                      | 100.0 | 2.5                    | 66.7             | -                                | 27.3                      | -                                  | 1.6                           | -                                      | 1.9                   |
| KANSAS.....                                       | 100.0 | 12.6                   | 28.5             | -                                | 51.9                      | -                                  | 2.2                           | -                                      | 4.8                   |
| ALASKA.....                                       | 100.0 | 62.2                   | 3.3              | -                                | 27.9                      | -                                  | .5                            | -                                      | 6.1                   |
| NEW HAMPSHIRE.....                                | 100.0 | 23.2                   | 38.7             | -                                | 33.9                      | -                                  | 1.8                           | -                                      | 2.4                   |
| ARKANSAS.....                                     | 100.0 | 44.1                   | 2.2              | -                                | 31.0                      | -                                  | .6                            | -                                      | 2.0                   |
| NEBRASKA.....                                     | 100.0 | 30.9                   | 12.5             | -                                | 34.1                      | -                                  | .4                            | -                                      | 2.1                   |
| WYOMING.....                                      | 100.0 | 60.6                   | 15.7             | -                                | 22.2                      | -                                  | -                             | -                                      | 1.5                   |
| NORTH DAKOTA.....                                 | 100.0 | 59.8                   | 14.3             | -                                | 21.0                      | -                                  | 2.7                           | -                                      | 2.2                   |
| MAINE.....                                        | 100.0 | 11.7                   | 26.5             | -                                | 26.6                      | -                                  | 25.6                          | -                                      | 9.6                   |
| DELAWARE.....                                     | 100.0 | 5.1                    | 47.7             | -                                | 43.3                      | -                                  | 2.5                           | -                                      | 1.4                   |
| SOUTH DAKOTA.....                                 | 100.0 | 26.4                   | 26.7             | -                                | 36.5                      | -                                  | 3.2                           | -                                      | 7.1                   |
| OUTLYING AREAS.....                               | 100.0 | 20.6                   | 49.6             | -                                | 18.0                      | 8.2                                | 1.0                           | -                                      | 2.6                   |
| OFFICES ABROAD.....                               | 100.0 | 64.0                   | 5.8              | -                                | 1.1                       | 9.1                                | 18.6                          | 1.3                                    | .1                    |

\* PERCENTAGE LESS THAN .05%.

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-102. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY STATE AND AGENCY: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| STATE (IN ORDER OF TOTAL<br>FEDERAL R&D OBLIGATIONS) | TOTAL      | DEPT OF<br>AGRI-<br>CULTURE | DEPT OF<br>COM-<br>MERCE | DEPT OF<br>DEFENSE | DEPT OF<br>ENERGY | DEPT OF<br>HEALTH,<br>EDUC &<br>WELFARE | DEPT OF<br>THE<br>INTERI-<br>OR | DEPT OF<br>TRANS-<br>POR-<br>TATION | ENVIRON-<br>MENTAL<br>PROTEC-<br>TION<br>AGENCY | NATIONAL<br>AERONAUTICS<br>& SPACE<br>ADMIN. | NATIONAL<br>SCIENCE<br>FOUNDATION |
|------------------------------------------------------|------------|-----------------------------|--------------------------|--------------------|-------------------|-----------------------------------------|---------------------------------|-------------------------------------|-------------------------------------------------|----------------------------------------------|-----------------------------------|
| TOTAL, ALL STATES.....                               | 23,343,776 | 540,983                     | 244,227                  | 10,946,257         | 3,525,469         | 2,750,732                               | 295,146                         | 354,270                             | 289,422                                         | 3,701,722                                    | 693,548                           |
| CALIFORNIA.....                                      | 6,106,557  | 33,188                      | 12,999                   | 3,321,653          | 632,039           | 315,610                                 | 30,541                          | 38,333                              | 44,076                                          | 1,569,088                                    | 109,030                           |
| MARYLAND.....                                        | 2,030,185  | 58,860                      | 72,712                   | 883,336            | 27,336            | 576,711                                 | 9,811                           | 45,133                              | 14,202                                          | 327,581                                      | 14,503                            |
| MASSACHUSETTS.....                                   | 1,474,411  | 1,888                       | 10,864                   | 1,033,162          | 70,615            | 199,703                                 | 5,038                           | 61,771                              | 8,104                                           | 46,817                                       | 56,469                            |
| NEW YORK.....                                        | 1,202,810  | 15,617                      | 6,711                    | 533,159            | 205,820           | 293,654                                 | 4,658                           | 12,730                              | 6,647                                           | 51,212                                       | 72,594                            |
| FLORIDA.....                                         | 919,052    | 13,386                      | 10,195                   | 540,450            | 12,032            | 32,762                                  | 4,046                           | 5,193                               | 7,423                                           | 200,408                                      | 13,157                            |
| TEXAS.....                                           | 896,516    | 22,235                      | 5,572                    | 312,009            | 23,207            | 94,774                                  | 5,314                           | 29,809                              | 10,526                                          | 377,222                                      | 15,840                            |
| WASHINGTON.....                                      | 878,619    | 8,818                       | 14,162                   | 479,883            | 245,566           | 62,014                                  | 8,399                           | 12,659                              | 3,190                                           | 29,333                                       | 14,595                            |
| PENNSYLVANIA.....                                    | 837,488    | 14,807                      | 3,020                    | 308,723            | 242,389           | 132,927                                 | 39,234                          | 19,223                              | 4,869                                           | 47,319                                       | 24,977                            |
| VIRGINIA.....                                        | 799,166    | 4,308                       | 4,438                    | 480,239            | 26,592            | 44,926                                  | 17,523                          | 27,736                              | 5,747                                           | 179,039                                      | 8,616                             |
| NEW MEXICO.....                                      | 750,863    | 2,391                       | 721                      | 231,496            | 479,000           | 9,064                                   | 3,768                           | 398                                 | 495                                             | 20,786                                       | 2,746                             |
| DISTRICT OF COLUMBIA.....                            | 729,551    | 54,951                      | 11,334                   | 248,095            | 110,259           | 102,410                                 | 11,524                          | 30,759                              | 14,615                                          | 53,901                                       | 91,703                            |
| OHIO.....                                            | 694,449    | 7,884                       | 712                      | 381,357            | 59,847            | 65,721                                  | 2,996                           | 9,852                               | 29,789                                          | 123,949                                      | 12,346                            |
| MISSOURI.....                                        | 638,441    | 7,673                       | 1,057                    | 548,460            | 1,982             | 51,835                                  | 5,874                           | 5,959                               | 3,472                                           | 4,833                                        | 7,294                             |
| NEW JERSEY.....                                      | 566,216    | 2,657                       | 12,484                   | 387,432            | 80,878            | 26,494                                  | 2,845                           | 5,529                               | 6,948                                           | 28,468                                       | 12,481                            |
| TENNESSEE.....                                       | 546,034    | 5,192                       | 308                      | 90,342             | 393,718           | 35,081                                  | 1,421                           | 561                                 | 7,058                                           | 9,425                                        | 2,928                             |
| ILLINOIS.....                                        | 516,958    | 20,813                      | 949                      | 57,168             | 288,872           | 87,299                                  | 4,977                           | 6,063                               | 6,165                                           | 12,434                                       | 32,218                            |
| ALABAMA.....                                         | 433,614    | 6,530                       | 1,787                    | 173,318            | 29,472            | 23,844                                  | 2,797                           | 2,251                               | 2,149                                           | 188,416                                      | 1,076                             |
| COLORADO.....                                        | 322,537    | 11,066                      | 30,530                   | 50,804             | 32,113            | 36,819                                  | 34,579                          | 27,405                              | 3,558                                           | 60,575                                       | 35,288                            |
| MICHIGAN.....                                        | 315,402    | 6,929                       | 3,957                    | 187,168            | 24,401            | 56,407                                  | 3,526                           | 5,645                               | 3,120                                           | 7,378                                        | 16,871                            |
| CONNECTICUT.....                                     | 291,703    | 3,618                       | 2,766                    | 145,589            | 43,236            | 50,158                                  | 616                             | 4,157                               | 1,553                                           | 31,276                                       | 8,738                             |
| MINNESOTA.....                                       | 186,233    | 8,972                       | 413                      | 76,745             | 9,356             | 56,736                                  | 7,015                           | 2,570                               | 10,723                                          | 7,913                                        | 5,790                             |
| NEVADA.....                                          | 183,520    | 1,408                       | 701                      | 23,484             | 140,504           | 1,072                                   | 7,158                           | 115                                 | 7,182                                           | 1,641                                        | 886                               |
| LOUISIANA.....                                       | 156,357    | 24,735                      | 1,893                    | 11,098             | 2,690             | 16,534                                  | 1,056                           | 3,340                               | 1,238                                           | 92,028                                       | 1,745                             |
| NORTH CAROLINA.....                                  | 154,682    | 12,244                      | 2,854                    | 18,125             | 2,525             | 70,136                                  | 1,664                           | 925                                 | 34,187                                          | 2,079                                        | 9,947                             |
| ARIZONA.....                                         | 141,850    | 9,466                       | 261                      | 74,949             | 8,925             | 13,280                                  | 5,611                           | 819                                 | 495                                             | 12,750                                       | 15,294                            |
| UTAH.....                                            | 132,324    | 5,420                       | 454                      | 25,327             | 11,673            | 18,584                                  | 8,447                           | 634                                 | 244                                             | 56,385                                       | 5,156                             |
| IDAHO.....                                           | 118,740    | 6,243                       | 115                      | 3,870              | 104,025           | 949                                     | 3,138                           | 16                                  | 103                                             | -                                            | 278                               |
| GEORGIA.....                                         | 110,825    | 22,601                      | 1,568                    | 12,874             | 9,703             | 37,996                                  | 1,679                           | 1,390                               | 8,816                                           | 8,201                                        | 5,997                             |
| RHODE ISLAND.....                                    | 109,935    | 817                         | 3,033                    | 82,668             | 797               | 6,001                                   | 610                             | 430                                 | 5,662                                           | 1,115                                        | 8,802                             |
| INDIANA.....                                         | 102,728    | 4,928                       | 1,403                    | 42,979             | 4,888             | 21,691                                  | 808                             | 1,378                               | 1,286                                           | 6,528                                        | 16,839                            |
| MISSISSIPPI.....                                     | 95,168     | 17,463                      | 4,900                    | 40,694             | 789               | 5,071                                   | 2,364                           | 807                                 | 517                                             | 22,279                                       | 284                               |
| WISCONSIN.....                                       | 94,477     | 16,192                      | 1,361                    | 5,243              | 4,624             | 46,249                                  | 2,848                           | 595                                 | 2,556                                           | 3,334                                        | 11,475                            |
| OREGON.....                                          | 84,320     | 12,322                      | 3,261                    | 3,999              | 7,808             | 27,681                                  | 6,409                           | 1,394                               | 9,360                                           | 2,330                                        | 9,776                             |
| SOUTH CAROLINA.....                                  | 66,997     | 6,862                       | 504                      | 7,916              | 40,044            | 6,446                                   | 1,255                           | 573                                 | 1,482                                           | 206                                          | 1,709                             |
| IOWA.....                                            | 59,448     | 13,266                      | 100                      | 7,488              | 11,741            | 18,822                                  | 1,099                           | 267                                 | 572                                             | 2,007                                        | 4,086                             |
| KENTUCKY.....                                        | 56,224     | 5,536                       | 99                       | 7,203              | 23,958            | 10,543                                  | 2,607                           | 1,461                               | 1,383                                           | 903                                          | 2,871                             |
| WEST VIRGINIA.....                                   | 49,657     | 4,428                       | 34                       | 176                | 24,663            | 9,393                                   | 1,960                           | 1,188                               | 141                                             | 81                                           | 7,593                             |
| OKLAHOMA.....                                        | 47,749     | 5,569                       | 2,729                    | 4,270              | 13,057            | 7,989                                   | 1,592                           | 2,269                               | 7,463                                           | 735                                          | 2,076                             |
| MONTANA.....                                         | 45,471     | 9,735                       | 321                      | 1,124              | 22,555            | 4,997                                   | 4,726                           | 35                                  | 1,151                                           | 33                                           | 794                               |
| HAWAII.....                                          | 36,914     | 3,116                       | 2,987                    | 12,898             | 2,059             | 6,827                                   | 1,500                           | 59                                  | 184                                             | 2,688                                        | 4,595                             |
| VERMONT.....                                         | 36,409     | 1,581                       | 195                      | 21,885             | 517               | 9,224                                   | 267                             | 59                                  | 2,301                                           | 92                                           | 288                               |
| KANSAS.....                                          | 36,220     | 4,870                       | 433                      | 7,134              | 3,172             | 13,025                                  | 1,273                           | 580                                 | 894                                             | 2,448                                        | 2,397                             |
| ALASKA.....                                          | 35,808     | 3,290                       | 4,072                    | 9,442              | 752               | 1,545                                   | 10,485                          | 288                                 | 495                                             | 1,238                                        | 4,201                             |
| NEW HAMPSHIRE.....                                   | 32,479     | 2,241                       | 433                      | 16,633             | 2,356             | 5,960                                   | 526                             | 22                                  | 488                                             | 2,183                                        | 1,629                             |
| ARKANSAS.....                                        | 24,315     | 3,970                       | 405                      | 996                | 192               | 11,904                                  | 1,863                           | 96                                  | 4,205                                           | 279                                          | 405                               |
| NEBRASKA.....                                        | 24,096     | 8,800                       | 19                       | 2,607              | 817               | 8,208                                   | 672                             | 25                                  | 78                                              | 209                                          | 2,661                             |
| WYOMING.....                                         | 23,875     | 1,934                       | 19                       | 217                | 12,389            | 606                                     | 6,589                           | 149                                 | 176                                             | 982                                          | 814                               |
| NORTH DAKOTA.....                                    | 18,749     | 9,000                       | 118                      | 886                | 5,363             | 647                                     | 2,367                           | 18                                  | 369                                             | -                                            | 177                               |
| MAINE.....                                           | 18,032     | 2,462                       | 1,313                    | 3,130              | 957               | 5,172                                   | 1,012                           | 1,253                               | 693                                             | 142                                          | 1,898                             |
| DELAWARE.....                                        | 15,271     | 1,707                       | 839                      | 6,546              | 1,620             | 1,560                                   | 343                             | 271                                 | 102                                             | 493                                          | 1,590                             |
| SOUTH DAKOTA.....                                    | 7,988      | 2,720                       | 19                       | 300                | 2,293             | 831                                     | 1,093                           | 46                                  | 166                                             | 252                                          | 264                               |
| OUTLYING AREAS.....                                  | 47,717     | 4,298                       | 694                      | 16,368             | 12,577            | 4,746                                   | 4,697                           | 58                                  | -                                               | 34                                           | 4,247                             |
| OFFICES ABROAD.....                                  | 38,624     | -                           | 31                       | 5,279              | 6,698             | 106                                     | 924                             | -                                   | 1,202                                           | 20,884                                       | 3,500                             |

NOTE: THE OBLIGATIONS OF THE TEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&D OBLIGATIONS IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE 8-102A. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT OF EACH AGENCY, BY STATE: FISCAL YEAR 1977

| STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS) | TOTAL  | DEPT OF AGRICULTURE | DEPT OF COMMERCE | DEPT OF DEFENSE | DEPT OF ENERGY | DEPT OF HEALTH, EDUC & WELFARE | DEPT OF THE INTERIOR | DEPT OF TRANSPORTATION | ENVIRONMENTAL PROTECTION AGENCY | NATIONAL AERONAUTICS & SPACE ADMIN | NATIONAL SCIENCE FOUNDATION |
|---------------------------------------------------|--------|---------------------|------------------|-----------------|----------------|--------------------------------|----------------------|------------------------|---------------------------------|------------------------------------|-----------------------------|
| TOTAL, ALL STATES.....                            | 100.0% | 100.0%              | 100.0%           | 100.0%          | 100.0%         | 100.0%                         | 100.0%               | 100.0%                 | 100.0%                          | 100.0%                             | 100.0%                      |
| CALIFORNIA.....                                   | 26.2   | 6.1                 | 5.3              | 30.3            | 17.9           | 11.5                           | 10.3                 | 10.8                   | 15.2                            | 42.4                               | 15.7                        |
| MARYLAND.....                                     | 8.7    | 10.9                | 29.8             | 8.1             | .8             | 21.0                           | 3.3                  | 12.7                   | 4.9                             | 8.8                                | 2.1                         |
| MASSACHUSETTS.....                                | 6.3    | .3                  | 4.4              | 9.4             | 2.0            | 7.3                            | 1.7                  | 11.8                   | 2.8                             | 1.3                                | 8.1                         |
| NEW YORK.....                                     | 5.2    | 2.9                 | 2.7              | 4.9             | 5.8            | 10.7                           | 1.6                  | 3.6                    | 2.3                             | 1.4                                | 10.5                        |
| FLORIDA.....                                      | 3.9    | 2.5                 | 4.2              | 4.9             | .3             | 1.2                            | 1.4                  | 1.5                    | 2.6                             | 7.6                                | 1.9                         |
| TEXAS.....                                        | 3.8    | 4.1                 | 2.3              | 2.8             | .7             | 3.4                            | 1.8                  | 8.4                    | 3.6                             | 10.2                               | 2.3                         |
| WASHINGTON.....                                   | 3.8    | 1.6                 | 5.8              | 4.4             | 7.0            | 2.3                            | 2.8                  | 3.6                    | 1.1                             | .8                                 | 2.1                         |
| PENNSYLVANIA.....                                 | 3.6    | 2.7                 | 1.2              | 2.8             | 6.9            | 4.8                            | 13.3                 | 5.4                    | 1.7                             | 1.3                                | 3.6                         |
| VIRGINIA.....                                     | 3.4    | .8                  | 1.8              | 4.4             | .8             | 1.6                            | 5.9                  | 7.8                    | 2.0                             | 4.8                                | 1.2                         |
| NEW MEXICO.....                                   | 3.2    | .4                  | .3               | 2.1             | 13.6           | .3                             | 1.3                  | .1                     | .2                              | .6                                 | .4                          |
| DISTRICT OF COLUMBIA.....                         | 3.1    | 10.2                | 4.6              | 2.3             | 3.1            | 3.7                            | 3.9                  | 8.7                    | 5.0                             | 1.5                                | 13.2                        |
| OHIO.....                                         | 3.0    | 1.5                 | .3               | 3.5             | 1.7            | 2.4                            | 1.0                  | 2.8                    | 10.3                            | 3.3                                | 1.8                         |
| MISSOURI.....                                     | 2.7    | 1.4                 | .4               | 5.0             | .1             | 1.9                            | 2.0                  | 1.7                    | 1.2                             | .1                                 | 1.1                         |
| NEW JERSEY.....                                   | 2.4    | .5                  | 5.1              | 3.5             | 2.3            | 1.0                            | 1.0                  | 1.6                    | 2.4                             | .8                                 | 1.8                         |
| TENNESSEE.....                                    | 2.3    | 1.0                 | .1               | .8              | 11.2           | 1.3                            | .5                   | .2                     | 2.4                             | .3                                 | .4                          |
| ILLINOIS.....                                     | 2.2    | 3.8                 | .4               | .5              | 8.2            | 3.2                            | 1.7                  | 1.7                    | 2.1                             | .3                                 | 4.6                         |
| ALABAMA.....                                      | 1.9    | 1.2                 | .7               | 1.6             | .8             | .9                             | .9                   | .6                     | .7                              | 5.1                                | .2                          |
| COLORADO.....                                     | 1.4    | 2.0                 | 12.5             | .5              | .9             | 4.3                            | 11.7                 | 7.7                    | 1.2                             | 1.6                                | 5.1                         |
| MICHIGAN.....                                     | 1.4    | 1.3                 | 1.6              | 1.7             | .7             | 2.1                            | 1.2                  | 1.6                    | 1.1                             | .2                                 | 2.4                         |
| CONNECTICUT.....                                  | 1.2    | .7                  | 1.1              | 1.3             | 1.2            | 1.8                            | .2                   | 1.2                    | .5                              | .8                                 | 1.3                         |
| MINNESOTA.....                                    | .8     | 1.7                 | .2               | .7              | .3             | 2.1                            | 2.4                  | .7                     | 3.7                             | .2                                 | .8                          |
| NEVADA.....                                       | .8     | .3                  | .8               | .2              | 4.0            | .8                             | 2.4                  | .8                     | 2.5                             | .8                                 | .1                          |
| LOUISIANA.....                                    | .7     | 4.6                 | .8               | .1              | .1             | .6                             | .4                   | .9                     | .4                              | 2.5                                | .3                          |
| NORTH CAROLINA.....                               | .7     | 2.3                 | 1.2              | .2              | .1             | 2.5                            | .6                   | .3                     | 11.8                            | .1                                 | 1.4                         |
| ARIZONA.....                                      | .6     | 1.7                 | .1               | .7              | .3             | .5                             | 1.9                  | .2                     | .2                              | .3                                 | 2.2                         |
| UTAH.....                                         | .6     | 1.0                 | .2               | .2              | .3             | .7                             | 2.9                  | .2                     | .1                              | 1.5                                | .7                          |
| IDAHO.....                                        | .5     | 1.2                 | .8               | .8              | 3.0            | .8                             | 1.1                  | .8                     | .8                              | .8                                 | .8                          |
| GEORGIA.....                                      | .5     | 4.2                 | .6               | .1              | .3             | 1.4                            | .6                   | .4                     | 3.0                             | .2                                 | .9                          |
| RHODE ISLAND.....                                 | .5     | .2                  | 1.2              | .8              | .8             | .2                             | .2                   | .1                     | 2.0                             | .8                                 | 1.3                         |
| INDIANA.....                                      | .4     | .9                  | .6               | .4              | .1             | .8                             | .3                   | .4                     | .4                              | .2                                 | 2.4                         |
| MISSISSIPPI.....                                  | .4     | 3.2                 | 2.0              | .4              | .8             | .2                             | .8                   | .2                     | .2                              | .6                                 | .8                          |
| WISCONSIN.....                                    | .4     | 3.0                 | .6               | .8              | .1             | 1.7                            | 1.0                  | .2                     | .9                              | .1                                 | 1.7                         |
| OREGON.....                                       | .4     | 2.3                 | 1.3              | .8              | .2             | 1.0                            | 2.2                  | .4                     | 3.2                             | .1                                 | 1.4                         |
| SOUTH CAROLINA.....                               | .3     | 1.3                 | .2               | .1              | 1.1            | .2                             | .4                   | .2                     | .5                              | .8                                 | .2                          |
| IOA.....                                          | .3     | 2.5                 | .8               | .1              | .3             | .7                             | .4                   | .1                     | .2                              | .1                                 | .6                          |
| KENTUCKY.....                                     | .4     | 1.0                 | .8               | .1              | .7             | .4                             | .9                   | .4                     | .5                              | .8                                 | .4                          |
| WEST VIRGINIA.....                                | .2     | .8                  | .8               | .8              | .7             | .3                             | .7                   | .3                     | .8                              | .8                                 | 1.1                         |
| OKLAHOMA.....                                     | .2     | 1.0                 | 1.1              | .8              | .4             | .3                             | .5                   | .6                     | 2.6                             | .8                                 | .3                          |
| MONTANA.....                                      | .2     | 1.8                 | .1               | .8              | .6             | .2                             | 1.6                  | .8                     | .4                              | .8                                 | .1                          |
| HAWAII.....                                       | .2     | .6                  | 1.2              | .1              | .1             | .2                             | .5                   | .8                     | .1                              | .1                                 | .7                          |
| VERMONT.....                                      | .2     | .3                  | .1               | .2              | .8             | .3                             | .1                   | .8                     | .8                              | .8                                 | .8                          |
| KANSAS.....                                       | .2     | .9                  | .2               | .1              | .1             | .5                             | .4                   | .2                     | .3                              | .1                                 | .3                          |
| ALASKA.....                                       | .2     | .6                  | 1.7              | .1              | .8             | .1                             | 3.6                  | .1                     | .2                              | .8                                 | .6                          |
| NEW HAMPSHIRE.....                                | .1     | .4                  | .2               | .2              | .1             | .2                             | .2                   | .8                     | .2                              | .1                                 | .2                          |
| ARKANSAS.....                                     | .1     | .7                  | .2               | .8              | .8             | .4                             | .6                   | .8                     | 1.5                             | .8                                 | .1                          |
| NEBRASKA.....                                     | .1     | 1.6                 | .8               | .8              | .8             | .3                             | .2                   | .8                     | .8                              | .8                                 | .4                          |
| WYOMING.....                                      | .1     | .4                  | .8               | .8              | .4             | .8                             | 2.2                  | .8                     | .1                              | .8                                 | .1                          |
| NORTH DAKOTA.....                                 | .1     | 1.7                 | .8               | .8              | .2             | .8                             | .8                   | .8                     | .1                              | .8                                 | .8                          |
| MAINE.....                                        | .1     | .5                  | .5               | .8              | .8             | .2                             | .3                   | .4                     | .2                              | .8                                 | .3                          |
| DELAWARE.....                                     | .1     | .3                  | .3               | .1              | .8             | .1                             | .1                   | .1                     | .8                              | .8                                 | .2                          |
| SOUTH DAKOTA.....                                 | .8     | .5                  | .8               | .8              | .1             | .8                             | .4                   | .8                     | .1                              | .8                                 | .8                          |
| OUTLYING AREAS.....                               | .2     | .8                  | .3               | .1              | .4             | .2                             | 1.6                  | .8                     | .8                              | .8                                 | .6                          |
| OFFICES ABROAD.....                               | .2     | .8                  | .8               | .8              | .2             | .8                             | .3                   | .8                     | .4                              | .6                                 | .5                          |

\* PERCENTAGE LESS THAN .05%.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-102B. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT OF EACH STATE, BY AGENCY: FISCAL YEAR 1977

| STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS) | TOTAL  | DEPT OF AGRICULTURE | DEPT OF COMMERCE | DEPT OF DEFENSE | DEPT OF ENERGY | DEPT OF HEALTH, EDUC & WELFARE | DEPT OF THE INTERIOR | DEPT OF TRANSPORTATION | ENVIRONMENTAL PROTECTION AGENCY | NATIONAL AERONAUTICS & SPACE ADMIN | NATIONAL SCIENCE FOUNDATION |
|---------------------------------------------------|--------|---------------------|------------------|-----------------|----------------|--------------------------------|----------------------|------------------------|---------------------------------|------------------------------------|-----------------------------|
| TOTAL, ALL STATES.....                            | 100.00 | 2.32                | 1.02             | 40.92           | 15.12          | 11.02                          | 1.32                 | 1.52                   | 1.22                            | 15.92                              | 3.02                        |
| CALIFORNIA.....                                   | 100.0  | .5                  | .2               | 54.4            | 10.4           | 5.2                            | .5                   | .6                     | .7                              | 25.7                               | 1.0                         |
| MARYLAND.....                                     | 100.0  | 2.9                 | 3.6              | 43.5            | 1.3            | 28.4                           | .5                   | 2.2                    | .7                              | 14.1                               | .7                          |
| MASSACHUSETTS.....                                | 100.0  | .1                  | .7               | 70.1            | 4.8            | 13.5                           | .3                   | 2.8                    | .5                              | 3.2                                | 3.8                         |
| NEW YORK.....                                     | 100.0  | 1.3                 | .6               | 44.3            | 17.1           | 24.4                           | .4                   | 1.1                    | .6                              | 4.3                                | 6.0                         |
| FLORIDA.....                                      | 100.0  | 1.5                 | 1.1              | 58.6            | 1.3            | 3.6                            | .4                   | .6                     | .8                              | 30.5                               | 1.4                         |
| TEXAS.....                                        | 100.0  | 2.5                 | .6               | 34.8            | 2.6            | 10.6                           | .6                   | 3.3                    | 1.2                             | 42.1                               | 1.8                         |
| WASHINGTON.....                                   | 100.0  | 1.0                 | 1.6              | 54.6            | 27.9           | 7.1                            | 1.0                  | 1.4                    | .4                              | 3.3                                | 1.7                         |
| PENNSYLVANIA.....                                 | 100.0  | 1.8                 | .4               | 36.9            | 28.9           | 15.9                           | 4.7                  | 2.3                    | .6                              | 5.7                                | 3.0                         |
| VIRGINIA.....                                     | 100.0  | .5                  | .6               | 60.1            | 3.3            | 5.6                            | 2.2                  | 3.5                    | .7                              | 22.4                               | 1.1                         |
| NEW MEXICO.....                                   | 100.0  | .3                  | .1               | 30.8            | 63.8           | 1.2                            | .5                   | .1                     | .1                              | 2.8                                | .4                          |
| DISTRICT OF COLUMBIA.....                         | 100.0  | 7.3                 | 1.6              | 34.0            | 15.1           | 14.0                           | 1.6                  | 4.2                    | 2.0                             | 7.4                                | 12.6                        |
| OHIO.....                                         | 100.0  | 1.1                 | .1               | 54.9            | 8.6            | 9.5                            | .4                   | 1.4                    | 4.3                             | 17.8                               | 1.8                         |
| MISSOURI.....                                     | 100.0  | 1.2                 | .2               | 85.9            | .3             | 8.1                            | .9                   | .9                     | .5                              | .8                                 | 1.1                         |
| NEW JERSEY.....                                   | 100.0  | .5                  | 2.2              | 68.4            | 14.3           | 4.7                            | .5                   | 1.0                    | 1.2                             | 5.0                                | 2.2                         |
| TENNESSEE.....                                    | 100.0  | 1.0                 | .1               | 16.5            | 72.1           | 6.4                            | .3                   | .1                     | 1.3                             | 1.7                                | .5                          |
| ILLINOIS.....                                     | 100.0  | 4.0                 | .2               | 11.1            | 55.9           | 16.9                           | 1.0                  | 1.2                    | 1.2                             | 2.4                                | 6.2                         |
| ALABAMA.....                                      | 100.0  | 1.5                 | .4               | 40.0            | 6.8            | 6.0                            | .6                   | .5                     | .5                              | 43.5                               | .2                          |
| COLORADO.....                                     | 100.0  | 3.4                 | 9.5              | 15.8            | 10.0           | 11.4                           | 10.7                 | 8.5                    | 1.0                             | 18.8                               | 10.9                        |
| MICHIGAN.....                                     | 100.0  | 2.2                 | 1.3              | 59.3            | 7.7            | 17.9                           | 1.1                  | 1.8                    | 1.0                             | 2.3                                | 5.3                         |
| CONNECTICUT.....                                  | 100.0  | 1.2                 | .9               | 49.9            | 14.8           | 17.2                           | .2                   | 1.4                    | .5                              | 10.7                               | 3.0                         |
| MINNESOTA.....                                    | 100.0  | 4.8                 | .2               | 41.2            | 5.0            | 30.5                           | 3.8                  | 1.4                    | 5.8                             | 4.2                                | 3.1                         |
| NEVADA.....                                       | 100.0  | .8                  | .8               | 12.8            | 76.6           | .6                             | 3.9                  | .1                     | 3.9                             | .9                                 | .5                          |
| LOUISIANA.....                                    | 100.0  | 15.8                | 1.2              | 7.1             | 1.7            | 10.6                           | .7                   | 2.1                    | .8                              | 58.9                               | 1.1                         |
| NORTH CAROLINA.....                               | 100.0  | 7.9                 | 1.8              | 11.7            | 1.6            | 45.3                           | 1.1                  | .6                     | 22.1                            | 1.3                                | 6.4                         |
| ARIZONA.....                                      | 100.0  | 6.7                 | .2               | 52.8            | 6.3            | 9.4                            | 4.0                  | .6                     | .3                              | 9.0                                | 10.8                        |
| UTAH.....                                         | 100.0  | 4.1                 | .3               | 19.1            | 8.8            | 14.0                           | 6.4                  | .5                     | .2                              | 42.6                               | 3.9                         |
| IDAHO.....                                        | 100.0  | 5.3                 | .1               | 3.3             | 87.6           | .8                             | 2.6                  | .8                     | .1                              | -                                  | .2                          |
| GEORGIA.....                                      | 100.0  | 20.4                | 1.4              | 11.6            | 8.8            | 34.3                           | 1.5                  | 1.3                    | 8.0                             | 7.4                                | 5.4                         |
| RHODE ISLAND.....                                 | 100.0  | .7                  | 2.8              | 75.2            | .7             | 5.5                            | .6                   | .4                     | 5.2                             | 1.0                                | 8.0                         |
| INDIANA.....                                      | 100.0  | 4.8                 | 1.4              | 41.8            | 4.8            | 21.1                           | .8                   | 1.3                    | 1.3                             | 6.4                                | 16.4                        |
| MISSISSIPPI.....                                  | 100.0  | 18.3                | 5.1              | 42.8            | .8             | 5.3                            | 2.5                  | .8                     | .5                              | 23.4                               | .3                          |
| WISCONSIN.....                                    | 100.0  | 17.1                | 1.4              | 5.5             | 4.9            | 49.0                           | 3.0                  | .6                     | 2.7                             | 3.5                                | 12.1                        |
| OREGON.....                                       | 100.0  | 14.6                | 3.9              | 4.7             | 9.3            | 32.8                           | 7.6                  | 1.7                    | 11.1                            | 2.8                                | 11.6                        |
| SOUTH CAROLINA.....                               | 100.0  | 10.2                | .8               | 11.8            | 59.8           | 9.6                            | 1.9                  | .9                     | 2.2                             | .3                                 | 2.6                         |
| IOWA.....                                         | 100.0  | 22.3                | .2               | 12.6            | 19.8           | 31.7                           | 1.8                  | .4                     | 1.0                             | 3.4                                | 6.9                         |
| KENTUCKY.....                                     | 100.0  | 9.8                 | .2               | 12.9            | 42.6           | 18.8                           | 4.6                  | 2.6                    | 2.5                             | .9                                 | 5.1                         |
| WEST VIRGINIA.....                                | 100.0  | 8.9                 | .1               | .4              | 49.7           | 18.9                           | 3.9                  | 2.4                    | .3                              | .2                                 | 15.3                        |
| OKLAHOMA.....                                     | 100.0  | 11.7                | 5.7              | 8.9             | 27.3           | 16.7                           | 3.3                  | 4.8                    | 15.6                            | 1.5                                | 4.3                         |
| MONTANA.....                                      | 100.0  | 21.4                | .7               | 2.5             | 49.6           | 11.0                           | 10.4                 | .1                     | 2.5                             | .1                                 | 1.7                         |
| HAWAII.....                                       | 100.0  | 8.4                 | 8.1              | 34.9            | 5.6            | 18.5                           | 4.1                  | .2                     | .5                              | 7.3                                | 12.4                        |
| VERMONT.....                                      | 100.0  | 4.3                 | .5               | 60.1            | 1.4            | 25.3                           | .7                   | .2                     | 6.3                             | .3                                 | .8                          |
| KANSAS.....                                       | 100.0  | 13.4                | 1.2              | 19.7            | 8.8            | 36.0                           | 3.5                  | 1.6                    | 2.5                             | 6.8                                | 6.6                         |
| ALASKA.....                                       | 100.0  | 9.2                 | 11.4             | 26.4            | 2.1            | 4.3                            | 29.3                 | .8                     | 1.4                             | 3.5                                | 11.7                        |
| NEW HAMPSHIRE.....                                | 100.0  | 6.9                 | 1.3              | 51.2            | 7.3            | 18.4                           | 1.6                  | .1                     | 1.5                             | 6.7                                | 5.0                         |
| ARKANSAS.....                                     | 100.0  | 16.3                | 1.7              | 4.1             | .8             | 49.0                           | 7.7                  | .4                     | 17.3                            | 1.1                                | 1.7                         |
| NEBRASKA.....                                     | 100.0  | 36.5                | .1               | 10.8            | 3.4            | 34.1                           | 2.8                  | .1                     | .3                              | .9                                 | 11.0                        |
| WYOMING.....                                      | 100.0  | 8.1                 | .1               | .9              | 51.9           | 2.5                            | 27.6                 | .6                     | .7                              | 4.1                                | 3.4                         |
| NORTH DAKOTA.....                                 | 100.0  | 48.0                | .6               | 3.7             | 28.6           | 3.5                            | 12.6                 | .1                     | 2.0                             | -                                  | .9                          |
| MAINE.....                                        | 100.0  | 13.7                | 7.3              | 17.4            | 5.3            | 28.7                           | 5.6                  | 6.9                    | 3.8                             | .8                                 | 10.5                        |
| DELAWARE.....                                     | 100.0  | 11.2                | 5.5              | 42.9            | 10.6           | 10.2                           | 2.2                  | 1.8                    | .7                              | 4.5                                | 10.4                        |
| SOUTH DAKOTA.....                                 | 100.0  | 34.1                | .2               | 3.8             | 28.7           | 10.4                           | 13.7                 | .6                     | 2.1                             | 3.2                                | 3.3                         |
| OUTLYING AREAS.....                               | 100.0  | 9.0                 | 1.5              | 34.3            | 26.4           | 9.9                            | 9.8                  | .1                     | -                               | .1                                 | 8.9                         |
| OFFICES ABROAD.....                               | 100.0  | -                   | .1               | 13.7            | 17.3           | .3                             | 2.4                  | -                      | 3.1                             | 54.1                               | 9.1                         |

\* PERCENTAGE LESS THAN .05%.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL      | FEDERAL<br>INTRA-<br>MURAL (1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |         | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|------------|--------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|---------|----------------------------------------------|-------------------------------------------------|--------------------------------|
|                                           |            |                                |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES |         |                                              |                                                 |                                |
| <b>TOTAL, ALL STATES</b>                  |            |                                |                     |                                                |                                   |                                             |         |                                              |                                                 |                                |
| TOTAL.....                                | 23,343,776 | 9,921,901                      | 11,084,451          | 1,053,504                                      | 2,833,972                         | 1,304,549                                   | 692,316 | 256,144                                      | 196,919                                         |                                |
| DEPARTMENT OF AGRICULTURE.....            | 540,983    | 392,876                        | 6,610               | -                                              | 140,059                           | -                                           | 246     | 173                                          | 1,017                                           |                                |
| DEPARTMENT OF COMMERCE.....               | 244,227    | 170,923                        | 24,908              | -                                              | 26,714                            | 1,198                                       | 8,230   | 223                                          | 12,031                                          |                                |
| DEPARTMENT OF DEFENSE.....                | 10,948,257 | 3,106,456                      | 6,988,025           | 109,415                                        | 262,793                           | 215,478                                     | 103,134 | 162,833                                      | 121                                             |                                |
| DEPARTMENT OF ENERGY.....                 | 3,525,449  | 137,341                        | 1,205,559           | 920,408                                        | 188,184                           | 941,145                                     | 40,882  | 76,787                                       | 15,163                                          |                                |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 2,750,732  | 554,659                        | 143,287             | 23,284                                         | 1,492,614                         | 6,316                                       | 443,151 | 2,701                                        | 84,720                                          |                                |
| DEPARTMENT OF THE INTERIOR.....           | 295,146    | 228,442                        | 37,813              | -                                              | 26,194                            | -                                           | 50      | 202                                          | 2,445                                           |                                |
| DEPARTMENT OF TRANSPORTATION.....         | 354,270    | 88,284                         | 164,473             | -                                              | 20,000                            | 719                                         | 8,088   | 10,552                                       | 62,154                                          |                                |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 289,422    | 125,616                        | 77,937              | -                                              | 45,610                            | -                                           | 24,247  | 685                                          | 15,327                                          |                                |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 3,701,722  | 1,037,794                      | 2,420,568           | -                                              | 120,928                           | 91,945                                      | 28,657  | 1,461                                        | 349                                             |                                |
| NATIONAL SCIENCE FOUNDATION.....          | 693,548    | 79,506                         | 15,271              | 397                                            | 510,876                           | 47,768                                      | 35,631  | 527                                          | 3,572                                           |                                |
| <b>NEW ENGLAND</b>                        |            |                                |                     |                                                |                                   |                                             |         |                                              |                                                 |                                |
| TOTAL.....                                | 1,962,949  | 287,914                        | 944,604             | 4,500                                          | 390,584                           | 65,062                                      | 163,554 | 42,634                                       | 14,117                                          |                                |
| DEPARTMENT OF AGRICULTURE.....            | 12,587     | 5,695                          | 7                   | -                                              | 6,284                             | -                                           | 14      | -                                            | 587                                             |                                |
| DEPARTMENT OF COMMERCE.....               | 18,602     | 9,809                          | 2,211               | -                                              | 4,075                             | -                                           | 1,296   | -                                            | 1,211                                           |                                |
| DEPARTMENT OF DEFENSE.....                | 1,303,067  | 224,687                        | 826,089             | -                                              | 100,357                           | 61,262                                      | 48,223  | 42,436                                       | 13                                              |                                |
| DEPARTMENT OF ENERGY.....                 | 118,476    | 2,979                          | 71,842              | 4,500                                          | 31,601                            | 3,428                                       | 3,801   | -                                            | 325                                             |                                |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 276,226    | 687                            | 18,419              | -                                              | 154,599                           | -                                           | 94,395  | 144                                          | 7,982                                           |                                |
| DEPARTMENT OF THE INTERIOR.....           | 8,069      | 3,334                          | 3,185               | -                                              | 1,544                             | -                                           | -       | -                                            | 6                                               |                                |
| DEPARTMENT OF TRANSPORTATION.....         | 47,692     | 34,515                         | 9,391               | -                                              | 1,659                             | -                                           | 42      | -                                            | 2,085                                           |                                |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 18,801     | 4,222                          | 9,365               | -                                              | 3,164                             | -                                           | 722     | -                                            | 1,328                                           |                                |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 81,645     | 1,941                          | 51,116              | -                                              | 17,216                            | -                                           | 11,332  | -                                            | -                                               |                                |
| NATIONAL SCIENCE FOUNDATION.....          | 77,824     | 25                             | 2,979               | -                                              | 70,085                            | 372                                         | 3,729   | 54                                           | 580                                             |                                |
| <b>CONNECTICUT</b>                        |            |                                |                     |                                                |                                   |                                             |         |                                              |                                                 |                                |
| TOTAL.....                                | 291,703    | 12,186                         | 205,870             | 4,500                                          | 62,086                            | -                                           | 3,727   | -                                            | 3,334                                           |                                |
| DEPARTMENT OF AGRICULTURE.....            | 3,618      | 2,437                          | -                   | -                                              | 665                               | -                                           | -       | -                                            | 516                                             |                                |
| DEPARTMENT OF COMMERCE.....               | 2,764      | 1,481                          | 865                 | -                                              | 103                               | -                                           | 50      | -                                            | 265                                             |                                |
| DEPARTMENT OF DEFENSE.....                | 145,589    | 6,485                          | 136,449             | -                                              | 2,646                             | -                                           | 9       | -                                            | -                                               |                                |
| DEPARTMENT OF ENERGY.....                 | 43,234     | -                              | 33,797              | 4,500                                          | 3,945                             | -                                           | 992     | -                                            | -                                               |                                |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 50,158     | -                              | 84                  | -                                              | 46,226                            | -                                           | 1,893   | -                                            | 1,955                                           |                                |
| DEPARTMENT OF THE INTERIOR.....           | 616        | 393                            | 49                  | -                                              | 174                               | -                                           | -       | -                                            | -                                               |                                |
| DEPARTMENT OF TRANSPORTATION.....         | 4,157      | 1,316                          | 2,243               | -                                              | 46                                | -                                           | 42      | -                                            | 510                                             |                                |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,553      | -                              | 1,240               | -                                              | 40                                | -                                           | 235     | -                                            | 38                                              |                                |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 31,276     | 74                             | 30,588              | -                                              | 583                               | -                                           | 31      | -                                            | -                                               |                                |
| NATIONAL SCIENCE FOUNDATION.....          | 8,730      | -                              | 555                 | -                                              | 7,658                             | -                                           | 475     | -                                            | 50                                              |                                |
| <b>MAINE</b>                              |            |                                |                     |                                                |                                   |                                             |         |                                              |                                                 |                                |
| TOTAL.....                                | 18,032     | 2,105                          | 4,772               | -                                              | 4,797                             | -                                           | 4,623   | -                                            | 1,735                                           |                                |
| DEPARTMENT OF AGRICULTURE.....            | 2,462      | 1,022                          | -                   | -                                              | 1,369                             | -                                           | -       | -                                            | 71                                              |                                |
| DEPARTMENT OF COMMERCE.....               | 1,313      | 1                              | 204                 | -                                              | 822                               | -                                           | 21      | -                                            | 265                                             |                                |
| DEPARTMENT OF DEFENSE.....                | 3,130      | 264                            | 2,870               | -                                              | -                                 | -                                           | -       | -                                            | -                                               |                                |
| DEPARTMENT OF ENERGY.....                 | 957        | -                              | 791                 | -                                              | 166                               | -                                           | -       | -                                            | -                                               |                                |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 5,172      | -                              | 37                  | -                                              | 511                               | -                                           | 4,313   | -                                            | 311                                             |                                |
| DEPARTMENT OF THE INTERIOR.....           | 1,012      | 824                            | -                   | -                                              | 184                               | -                                           | -       | -                                            | 6                                               |                                |
| DEPARTMENT OF TRANSPORTATION.....         | 1,253      | -                              | 636                 | -                                              | -                                 | -                                           | -       | -                                            | 617                                             |                                |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 693        | -                              | 155                 | -                                              | 73                                | -                                           | -       | -                                            | 465                                             |                                |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 142        | -                              | 79                  | -                                              | -                                 | -                                           | 63      | -                                            | -                                               |                                |
| NATIONAL SCIENCE FOUNDATION.....          | 1,898      | -                              | -                   | -                                              | 1,672                             | -                                           | 226     | -                                            | -                                               |                                |
| <b>MASSACHUSETTS</b>                      |            |                                |                     |                                                |                                   |                                             |         |                                              |                                                 |                                |
| TOTAL.....                                | 1,474,411  | 192,567                        | 731,128             | -                                              | 285,102                           | 65,062                                      | 151,188 | 42,634                                       | 6,730                                           |                                |
| DEPARTMENT OF AGRICULTURE.....            | 1,868      | 343                            | 7                   | -                                              | 1,504                             | -                                           | 14      | -                                            | -                                               |                                |
| DEPARTMENT OF COMMERCE.....               | 10,864     | 6,542                          | 1,082               | -                                              | 1,763                             | -                                           | 977     | -                                            | 500                                             |                                |
| DEPARTMENT OF DEFENSE.....                | 1,033,162  | 145,864                        | 639,117             | -                                              | 96,319                            | 61,262                                      | 48,151  | 42,436                                       | 13                                              |                                |
| DEPARTMENT OF ENERGY.....                 | 70,615     | 2,879                          | 35,447              | -                                              | 25,730                            | 3,428                                       | 2,806   | -                                            | 325                                             |                                |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 199,703    | 687                            | 18,271              | -                                              | 91,228                            | -                                           | 84,721  | 144                                          | 4,652                                           |                                |
| DEPARTMENT OF THE INTERIOR.....           | 5,038      | 1,454                          | 2,972               | -                                              | 614                               | -                                           | -       | -                                            | -                                               |                                |
| DEPARTMENT OF TRANSPORTATION.....         | 41,771     | 33,054                         | 6,444               | -                                              | 1,613                             | -                                           | -       | -                                            | 660                                             |                                |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 8,104      | 106                            | 5,637               | -                                              | 1,601                             | -                                           | 487     | -                                            | 273                                             |                                |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 46,817     | 1,640                          | 19,735              | -                                              | 14,237                            | -                                           | 11,205  | -                                            | -                                               |                                |
| NATIONAL SCIENCE FOUNDATION.....          | 56,469     | -                              | 2,416               | -                                              | 50,493                            | 372                                         | 2,827   | 54                                           | 307                                             |                                |
| <b>NEW HAMPSHIRE</b>                      |            |                                |                     |                                                |                                   |                                             |         |                                              |                                                 |                                |
| TOTAL.....                                | 32,479     | 7,538                          | 12,557              | -                                              | 11,015                            | -                                           | 589     | -                                            | 780                                             |                                |
| DEPARTMENT OF AGRICULTURE.....            | 2,241      | 1,276                          | -                   | -                                              | 965                               | -                                           | -       | -                                            | -                                               |                                |
| DEPARTMENT OF COMMERCE.....               | 433        | -                              | 11                  | -                                              | 185                               | -                                           | 164     | -                                            | 73                                              |                                |
| DEPARTMENT OF DEFENSE.....                | 18,633     | 5,767                          | 10,532              | -                                              | 334                               | -                                           | -       | -                                            | -                                               |                                |
| DEPARTMENT OF ENERGY.....                 | 2,356      | 100                            | 1,656               | -                                              | 600                               | -                                           | -       | -                                            | -                                               |                                |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 5,968      | -                              | -                   | -                                              | 5,322                             | -                                           | 425     | -                                            | 221                                             |                                |
| DEPARTMENT OF THE INTERIOR.....           | 526        | 252                            | 164                 | -                                              | 110                               | -                                           | -       | -                                            | 9                                               |                                |
| DEPARTMENT OF TRANSPORTATION.....         | 22         | 8                              | 5                   | -                                              | -                                 | -                                           | -       | -                                            | -                                               |                                |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 488        | -                              | -                   | -                                              | 36                                | -                                           | -       | -                                            | 452                                             |                                |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 2,183      | 110                            | 189                 | -                                              | 1,884                             | -                                           | -       | -                                            | -                                               |                                |
| NATIONAL SCIENCE FOUNDATION.....          | 1,029      | 25                             | -                   | -                                              | 1,579                             | -                                           | -       | -                                            | 25                                              |                                |

CONTINUED ON NEXT PAGE

TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL(1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|-----------|-------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                           |           |                               |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| <b>RHODE ISLAND</b>                       |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 109,935   | 72,615                        | 15,980              | -                                              | 17,662                            | -                                           | 2,833                                        | -                                                         | 845                            |
| DEPARTMENT OF AGRICULTURE.....            | 817       | -                             | -                   | -                                              | 817                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 3,033     | 1,706                         | 8                   | -                                              | 1,202                             | -                                           | 84                                           | -                                                         | 33                             |
| DEPARTMENT OF DEFENSE.....                | 82,668    | 68,264                        | 15,359              | -                                              | 982                               | -                                           | 63                                           | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 797       | -                             | -                   | -                                              | 794                               | -                                           | 3                                            | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 6,001     | -                             | 4                   | -                                              | 3,239                             | -                                           | 2,449                                        | -                                                         | 309                            |
| DEPARTMENT OF THE INTERIOR.....           | 610       | 258                           | -                   | -                                              | 352                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 430       | 137                           | 13                  | -                                              | -                                 | -                                           | -                                            | -                                                         | 280                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 5,662     | 4,116                         | 137                 | -                                              | 1,384                             | -                                           | -                                            | -                                                         | 25                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 1,115     | 134                           | 451                 | -                                              | 497                               | -                                           | 33                                           | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 8,802     | -                             | 8                   | -                                              | 8,395                             | -                                           | 201                                          | -                                                         | 198                            |
| <b>VERMONT</b>                            |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 36,409    | 903                           | 24,297              | -                                              | 9,922                             | -                                           | 594                                          | -                                                         | 693                            |
| DEPARTMENT OF AGRICULTURE.....            | 1,581     | 617                           | -                   | -                                              | 964                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 195       | 79                            | 41                  | -                                              | -                                 | -                                           | -                                            | -                                                         | 75                             |
| DEPARTMENT OF DEFENSE.....                | 21,885    | 47                            | 21,762              | -                                              | 76                                | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 517       | -                             | 151                 | -                                              | 366                               | -                                           | -                                            | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 9,224     | -                             | 23                  | -                                              | 8,073                             | -                                           | 594                                          | -                                                         | 534                            |
| DEPARTMENT OF THE INTERIOR.....           | 267       | 157                           | -                   | -                                              | 110                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 59        | -                             | 50                  | -                                              | -                                 | -                                           | -                                            | -                                                         | 9                              |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 2,301     | -                             | 2,196               | -                                              | 30                                | -                                           | -                                            | -                                                         | 75                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 92        | 3                             | 74                  | -                                              | 15                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 288       | -                             | -                   | -                                              | 288                               | -                                           | -                                            | -                                                         | -                              |
| <b>MIDDLE ATLANTIC</b>                    |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 2,606,514 | 471,098                       | 1,042,436           | 290,740                                        | 482,759                           | 152,252                                     | 129,572                                      | -                                                         | 37,657                         |
| DEPARTMENT OF AGRICULTURE.....            | 33,081    | 17,239                        | 5,525               | -                                              | 10,168                            | -                                           | 144                                          | -                                                         | 5                              |
| DEPARTMENT OF COMMERCE.....               | 22,288    | 11,231                        | 6,519               | -                                              | 2,168                             | 72                                          | 591                                          | -                                                         | 1,634                          |
| DEPARTMENT OF DEFENSE.....                | 1,229,314 | 372,303                       | 688,924             | 108,763                                        | 27,413                            | 24,382                                      | 7,529                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 529,095   | 22,244                        | 172,423             | 181,977                                        | 23,137                            | 126,258                                     | 1,599                                        | -                                                         | 1,457                          |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 453,075   | 1,491                         | 18,920              | -                                              | 297,821                           | 1,317                                       | 108,009                                      | -                                                         | 25,517                         |
| DEPARTMENT OF THE INTERIOR.....           | 46,737    | 36,738                        | 7,503               | -                                              | 2,425                             | -                                           | -                                            | -                                                         | 71                             |
| DEPARTMENT OF TRANSPORTATION.....         | 37,482    | 3,540                         | 22,955              | -                                              | 3,642                             | -                                           | 140                                          | -                                                         | 7,205                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 18,464    | 241                           | 11,754              | -                                              | 3,337                             | -                                           | 1,630                                        | -                                                         | 1,502                          |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 122,999   | 6,056                         | 105,988             | -                                              | 12,884                            | -                                           | 2,071                                        | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 110,552   | 15                            | 1,925               | -                                              | 99,764                            | 223                                         | 7,859                                        | -                                                         | 266                            |
| <b>NEW JERSEY</b>                         |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 566,216   | 208,369                       | 270,271             | -                                              | 37,348                            | 40,262                                      | 4,681                                        | -                                                         | 5,285                          |
| DEPARTMENT OF AGRICULTURE.....            | 2,657     | 511                           | 23                  | -                                              | 2,118                             | -                                           | -                                            | -                                                         | 5                              |
| DEPARTMENT OF COMMERCE.....               | 12,484    | 9,713                         | 1,394               | -                                              | 652                               | -                                           | 181                                          | -                                                         | 544                            |
| DEPARTMENT OF DEFENSE.....                | 387,432   | 195,562                       | 188,216             | -                                              | 3,570                             | -                                           | 84                                           | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 40,878    | 523                           | 37,135              | -                                              | 2,504                             | 40,262                                      | 289                                          | -                                                         | 165                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 26,494    | 232                           | 7,500               | -                                              | 14,116                            | -                                           | 3,620                                        | -                                                         | 1,026                          |
| DEPARTMENT OF THE INTERIOR.....           | 2,845     | 912                           | 1,794               | -                                              | 139                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 5,529     | 434                           | 1,702               | -                                              | 321                               | -                                           | -                                            | -                                                         | 3,072                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 6,948     | -                             | 6,104               | -                                              | 263                               | -                                           | 108                                          | -                                                         | 473                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 28,468    | 482                           | 25,437              | -                                              | 2,549                             | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 12,481    | -                             | 966                 | -                                              | 11,116                            | -                                           | 399                                          | -                                                         | -                              |
| <b>NEW YORK</b>                           |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 1,202,810 | 91,787                        | 459,110             | 133,318                                        | 308,891                           | 98,559                                      | 82,892                                       | -                                                         | 28,273                         |
| DEPARTMENT OF AGRICULTURE.....            | 15,617    | 11,240                        | -                   | -                                              | 4,233                             | -                                           | 144                                          | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 6,711     | 1,517                         | 2,559               | -                                              | 1,313                             | 72                                          | 340                                          | -                                                         | 910                            |
| DEPARTMENT OF DEFENSE.....                | 533,159   | 63,200                        | 370,005             | 67,726                                         | 14,340                            | 10,951                                      | 6,897                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 205,828   | 4,656                         | 33,276              | 65,592                                         | 14,159                            | 85,996                                      | 1,113                                        | -                                                         | 1,036                          |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 293,654   | 1,166                         | 4,981               | -                                              | 197,522                           | 1,317                                       | 66,008                                       | -                                                         | 22,660                         |
| DEPARTMENT OF THE INTERIOR.....           | 4,658     | 3,120                         | 790                 | -                                              | 748                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 12,730    | 1,480                         | 7,901               | -                                              | 665                               | -                                           | -                                            | -                                                         | 2,684                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 6,647     | 93                            | 2,733               | -                                              | 2,195                             | -                                           | 849                                          | -                                                         | 777                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 51,212    | 5,280                         | 36,699              | -                                              | 7,344                             | -                                           | 1,889                                        | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 72,594    | 15                            | 166                 | -                                              | 66,332                            | 223                                         | 5,652                                        | -                                                         | 206                            |
| <b>PENNSYLVANIA</b>                       |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 837,488   | 170,962                       | 313,055             | 157,422                                        | 136,520                           | 13,431                                      | 41,999                                       | -                                                         | 4,099                          |
| DEPARTMENT OF AGRICULTURE.....            | 14,807    | 5,408                         | 5,502               | -                                              | 3,817                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 3,020     | 1                             | 2,566               | -                                              | 203                               | -                                           | 70                                           | -                                                         | 180                            |
| DEPARTMENT OF DEFENSE.....                | 308,723   | 113,541                       | 130,703             | 41,037                                         | 9,463                             | 13,431                                      | 548                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 242,389   | 17,065                        | 102,012             | 116,385                                        | 6,474                             | -                                           | 197                                          | -                                                         | 256                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 132,927   | 93                            | 6,439               | -                                              | 86,183                            | -                                           | 38,381                                       | -                                                         | 1,831                          |
| DEPARTMENT OF THE INTERIOR.....           | 39,234    | 32,708                        | 4,919               | -                                              | 1,538                             | -                                           | -                                            | -                                                         | 71                             |
| DEPARTMENT OF TRANSPORTATION.....         | 19,223    | 1,620                         | 13,352              | -                                              | 2,656                             | -                                           | 140                                          | -                                                         | 1,449                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 4,869     | 148                           | 2,917               | -                                              | 879                               | -                                           | 673                                          | -                                                         | 252                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 47,319    | 294                           | 43,852              | -                                              | 2,991                             | -                                           | 182                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 24,977    | -                             | 793                 | -                                              | 22,316                            | -                                           | 1,808                                        | -                                                         | 60                             |

CONTINUED-ON NEXT PAGE



TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL(1) | EXTRAMURAL          |                                                |                                   |                                             |                                              | STATE<br>AND<br>LOCAL<br>GOVTS                            |
|-------------------------------------------|-----------|-------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|
|                                           |           |                               | INDUSTRIAL<br>FIRMS | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |
| <b>EAST NORTH CENTRAL</b>                 |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 1,724,014 | 447,088                       | 577,763             | 9,098                                          | 400,034                           | 197,615                                     | 75,171                                       | - 17,245                                                  |
| DEPARTMENT OF AGRICULTURE.....            | 56,746    | 39,372                        | 47                  | -                                              | 17,264                            | -                                           | -                                            | - 63                                                      |
| DEPARTMENT OF COMMERCE.....               | 8,382     | 2,764                         | 1,895               | -                                              | 2,084                             | -                                           | 1,169                                        | - 470                                                     |
| DEPARTMENT OF DEFENSE.....                | 673,915   | 247,563                       | 385,913             | -                                              | 27,913                            | 725                                         | 11,801                                       | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 382,632   | 19,403                        | 120,467             | 9,098                                          | 23,790                            | 196,356                                     | 12,172                                       | - 1,346                                                   |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 277,367   | 13,683                        | 10,277              | -                                              | 212,477                           | 194                                         | 35,426                                       | - 5,310                                                   |
| DEPARTMENT OF THE INTERIOR.....           | 15,155    | 8,620                         | 3,770               | -                                              | 2,132                             | -                                           | -                                            | - 633                                                     |
| DEPARTMENT OF TRANSPORTATION.....         | 23,533    | 3,321                         | 9,216               | -                                              | 3,421                             | -                                           | 2,358                                        | - 5,219                                                   |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 42,916    | 16,510                        | 5,461               | -                                              | 9,558                             | -                                           | 7,932                                        | - 3,455                                                   |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 153,617   | 95,734                        | 40,132              | -                                              | 15,111                            | 42                                          | 2,439                                        | - 159                                                     |
| NATIONAL SCIENCE FOUNDATION.....          | 89,751    | 118                           | 587                 | -                                              | 86,284                            | 298                                         | 1,874                                        | - 590                                                     |
| <b>ILLINOIS</b>                           |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 516,958   | 56,586                        | 102,163             | -                                              | 125,515                           | 196,975                                     | 30,607                                       | - 5,112                                                   |
| DEPARTMENT OF AGRICULTURE.....            | 20,813    | 17,356                        | -                   | -                                              | 3,457                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 949       | 1                             | 256                 | -                                              | 181                               | -                                           | 492                                          | - 19                                                      |
| DEPARTMENT OF DEFENSE.....                | 57,148    | 33,533                        | 16,195              | -                                              | 5,960                             | 725                                         | 755                                          | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 288,872   | 1,833                         | 73,447              | -                                              | 10,095                            | 195,716                                     | 7,157                                        | - 624                                                     |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 87,299    | 100                           | 1,457               | -                                              | 66,901                            | 194                                         | 17,179                                       | - 1,468                                                   |
| DEPARTMENT OF THE INTERIOR.....           | 4,977     | 2,095                         | 1,954               | -                                              | 608                               | -                                           | -                                            | - 320                                                     |
| DEPARTMENT OF TRANSPORTATION.....         | 8,063     | 125                           | 2,123               | -                                              | 865                               | -                                           | 1,784                                        | - 1,166                                                   |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 8,165     | 335                           | 412                 | -                                              | 2,350                             | -                                           | 1,815                                        | - 1,253                                                   |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 12,434    | 1,208                         | 6,187               | -                                              | 4,363                             | 42                                          | 634                                          | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 32,218    | -                             | 132                 | -                                              | 30,735                            | 298                                         | 791                                          | - 262                                                     |
| <b>INDIANA</b>                            |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 102,728   | 23,343                        | 28,156              | -                                              | 48,040                            | 640                                         | 1,086                                        | - 1,443                                                   |
| DEPARTMENT OF AGRICULTURE.....            | 4,920     | 1,782                         | -                   | -                                              | 3,146                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 1,403     | -                             | 1,183               | -                                              | 75                                | -                                           | -                                            | - 145                                                     |
| DEPARTMENT OF DEFENSE.....                | 42,979    | 19,834                        | 20,949              | -                                              | 2,175                             | -                                           | 21                                           | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 4,888     | -                             | 1,055               | -                                              | 2,899                             | 640                                         | 109                                          | - 194                                                     |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 21,691    | -                             | 992                 | -                                              | 19,916                            | -                                           | 228                                          | - 555                                                     |
| DEPARTMENT OF THE INTERIOR.....           | 808       | 562                           | -                   | -                                              | 246                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF TRANSPORTATION.....         | 1,378     | 395                           | 268                 | -                                              | 454                               | -                                           | -                                            | - 261                                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,286     | -                             | 277                 | -                                              | 590                               | -                                           | 161                                          | - 258                                                     |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 6,528     | 770                           | 3,310               | -                                              | 2,167                             | -                                           | 281                                          | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 16,839    | -                             | 122                 | -                                              | 16,372                            | -                                           | 295                                          | - 50                                                      |
| <b>MICHIGAN</b>                           |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 315,402   | 32,716                        | 179,156             | -                                              | 84,519                            | -                                           | 14,357                                       | - 4,654                                                   |
| DEPARTMENT OF AGRICULTURE.....            | 6,929     | 3,503                         | 26                  | -                                              | 3,400                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 3,957     | 2,637                         | 261                 | -                                              | 628                               | -                                           | 292                                          | - 139                                                     |
| DEPARTMENT OF DEFENSE.....                | 187,168   | 23,274                        | 151,204             | -                                              | 4,751                             | -                                           | 7,939                                        | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 24,401    | -                             | 18,875              | -                                              | 4,861                             | -                                           | 458                                          | - 207                                                     |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 56,407    | 14                            | 3,530               | -                                              | 46,572                            | -                                           | 4,273                                        | - 2,018                                                   |
| DEPARTMENT OF THE INTERIOR.....           | 3,526     | 2,848                         | 109                 | -                                              | 558                               | -                                           | -                                            | - 11                                                      |
| DEPARTMENT OF TRANSPORTATION.....         | 5,645     | 246                           | 2,966               | -                                              | 1,634                             | -                                           | -                                            | - 799                                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 3,120     | -                             | 93                  | -                                              | 1,490                             | -                                           | 178                                          | - 1,359                                                   |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 7,378     | 194                           | 2,085               | -                                              | 3,968                             | -                                           | 1,131                                        | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 16,871    | -                             | 7                   | -                                              | 16,657                            | -                                           | 86                                           | - 121                                                     |
| <b>OHIO</b>                               |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 694,449   | 319,306                       | 262,611             | 9,098                                          | 70,944                            | -                                           | 27,556                                       | - 4,934                                                   |
| DEPARTMENT OF AGRICULTURE.....            | 7,884     | 3,873                         | 1                   | -                                              | 3,947                             | -                                           | -                                            | - 63                                                      |
| DEPARTMENT OF COMMERCE.....               | 712       | 126                           | 39                  | -                                              | 68                                | -                                           | 385                                          | - 94                                                      |
| DEPARTMENT OF DEFENSE.....                | 381,357   | 170,888                       | 195,742             | -                                              | 11,675                            | -                                           | 3,072                                        | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 59,847    | 17,570                        | 27,033              | 9,098                                          | 1,403                             | -                                           | 4,457                                        | - 286                                                     |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 65,721    | 13,569                        | 2,754               | -                                              | 36,239                            | -                                           | 12,219                                       | - 940                                                     |
| DEPARTMENT OF THE INTERIOR.....           | 2,996     | 1,220                         | 1,177               | -                                              | 319                               | -                                           | -                                            | - 280                                                     |
| DEPARTMENT OF TRANSPORTATION.....         | 9,852     | 2,413                         | 3,591               | -                                              | 312                               | -                                           | 574                                          | - 2,962                                                   |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 29,789    | 16,175                        | 4,347               | -                                              | 3,363                             | -                                           | 5,754                                        | - 150                                                     |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 123,943   | 93,492                        | 27,705              | -                                              | 2,194                             | -                                           | 393                                          | - 159                                                     |
| NATIONAL SCIENCE FOUNDATION.....          | 12,348    | -                             | 222                 | -                                              | 11,424                            | -                                           | 702                                          | -                                                         |
| <b>WISCONSIN</b>                          |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 94,477    | 15,137                        | 5,677               | -                                              | 71,016                            | -                                           | 1,565                                        | - 1,082                                                   |
| DEPARTMENT OF AGRICULTURE.....            | 16,192    | 12,858                        | 20                  | -                                              | 3,314                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 1,361     | -                             | 156                 | -                                              | 1,132                             | -                                           | -                                            | - 73                                                      |
| DEPARTMENT OF DEFENSE.....                | 5,243     | 54                            | 1,823               | -                                              | 3,352                             | -                                           | 14                                           | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 4,624     | -                             | 57                  | -                                              | 4,532                             | -                                           | -                                            | - 35                                                      |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 46,249    | -                             | 1,544               | -                                              | 42,849                            | -                                           | 1,527                                        | - 329                                                     |
| DEPARTMENT OF THE INTERIOR.....           | 2,848     | 1,895                         | 530                 | -                                              | 401                               | -                                           | -                                            | - 22                                                      |
| DEPARTMENT OF TRANSPORTATION.....         | 595       | 142                           | 260                 | -                                              | 156                               | -                                           | -                                            | - 31                                                      |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 2,556     | -                             | 332                 | -                                              | 1,765                             | -                                           | 24                                           | - 435                                                     |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 3,334     | 70                            | 845                 | -                                              | 2,419                             | -                                           | -                                            | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 11,475    | 118                           | 104                 | -                                              | 11,096                            | -                                           | -                                            | - 157                                                     |

CONTINUED ON NEXT PAGE

TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMANCE FISCAL YEAR 1977.

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY | TOTAL   | FEDERAL<br>INTRA-<br>MURAL(1) | EXTRAMURAL          |                                                |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|----------------------------------------|---------|-------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                        |         |                               | INDUSTRIAL<br>FIRMS | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| <b>WEST NORTH CENTRAL</b>              |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                             | 971,175 | 76,880                        | 655,288             | -                                              | 176,508                           | 11,457                                      | 37,291                                       | 102                                                       | 13,649                         |
| DEPARTMENT OF AGRICULTURE.....         | 55,301  | 36,191                        | -                   | -                                              | 19,110                            | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....            | 2,159   | 615                           | 129                 | -                                              | 634                               | -                                           | 236                                          | -                                                         | 345                            |
| DEPARTMENT OF DEFENSE.....             | 643,420 | 15,968                        | 620,262             | -                                              | 3,998                             | -                                           | 3,192                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....              | 34,726  | 2,676                         | 17,622              | -                                              | 2,074                             | 11,263                                      | 152                                          | -                                                         | 939                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....  | 150,104 | 191                           | 245                 | -                                              | 116,214                           | -                                           | 30,829                                       | -                                                         | 2,625                          |
| DEPARTMENT OF THE INTERIOR.....        | 19,393  | 14,269                        | 2,708               | -                                              | 2,218                             | -                                           | -                                            | 102                                                       | 94                             |
| DEPARTMENT OF TRANSPORTATION.....      | 9,468   | -                             | 2,305               | -                                              | 404                               | -                                           | 188                                          | -                                                         | 6,568                          |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 16,274  | 6,366                         | 1,545               | -                                              | 4,049                             | -                                           | 1,513                                        | -                                                         | 2,801                          |
| NATIONAL AERONAUTICS AND SPACE ADMIN.  | 17,642  | 604                           | 10,380              | -                                              | 6,447                             | 194                                         | 37                                           | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....       | 22,671  | -                             | 92                  | -                                              | 21,360                            | -                                           | 1,144                                        | -                                                         | 75                             |
| <b>IOWA</b>                            |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                             | 59,448  | 10,431                        | 8,001               | -                                              | 29,040                            | 11,457                                      | 19                                           | -                                                         | 500                            |
| DEPARTMENT OF AGRICULTURE.....         | 13,266  | 9,565                         | -                   | -                                              | 3,701                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....            | 100     | 1                             | 81                  | -                                              | 42                                | -                                           | -                                            | -                                                         | 49                             |
| DEPARTMENT OF DEFENSE.....             | 7,488   | 272                           | 6,596               | -                                              | 620                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....              | 11,741  | -                             | 171                 | -                                              | 76                                | 11,263                                      | -                                            | -                                                         | 231                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....  | 18,822  | -                             | 51                  | -                                              | 18,634                            | -                                           | 19                                           | -                                                         | 164                            |
| DEPARTMENT OF THE INTERIOR.....        | 1,099   | 441                           | 485                 | -                                              | 173                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....      | 267     | -                             | 161                 | -                                              | 75                                | -                                           | -                                            | -                                                         | 31                             |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 572     | 145                           | -                   | -                                              | 427                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN.  | 2,007   | 7                             | 483                 | -                                              | 1,323                             | 194                                         | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....       | 4,086   | -                             | 92                  | -                                              | 3,969                             | -                                           | -                                            | -                                                         | 25                             |
| <b>KANSAS</b>                          |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                             | 36,226  | 4,578                         | 10,341              | -                                              | 18,790                            | -                                           | 780                                          | -                                                         | 1,737                          |
| DEPARTMENT OF AGRICULTURE.....         | 4,870   | 2,697                         | -                   | -                                              | 2,173                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....            | 433     | 365                           | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 64                             |
| DEPARTMENT OF DEFENSE.....             | 7,134   | 740                           | 5,939               | -                                              | 455                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....              | 3,172   | -                             | 2,591               | -                                              | 400                               | -                                           | -                                            | -                                                         | 181                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....  | 13,025  | -                             | 131                 | -                                              | 11,846                            | -                                           | 671                                          | -                                                         | 377                            |
| DEPARTMENT OF THE INTERIOR.....        | 1,273   | 759                           | 352                 | -                                              | 127                               | -                                           | -                                            | -                                                         | 35                             |
| DEPARTMENT OF TRANSPORTATION.....      | 580     | -                             | 129                 | -                                              | 51                                | -                                           | -                                            | -                                                         | 400                            |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 894     | -                             | 155                 | -                                              | 99                                | -                                           | 10                                           | -                                                         | 630                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN.  | 2,448   | 15                            | 1,044               | -                                              | 1,391                             | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....       | 2,397   | -                             | -                   | -                                              | 2,248                             | -                                           | 99                                           | -                                                         | 50                             |
| <b>MINNESOTA</b>                       |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                             | 186,233 | 17,424                        | 93,856              | -                                              | 48,947                            | -                                           | 21,498                                       | -                                                         | 4,508                          |
| DEPARTMENT OF AGRICULTURE.....         | 8,972   | 5,533                         | -                   | -                                              | 3,439                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....            | 413     | -                             | 110                 | -                                              | -                                 | -                                           | 10                                           | -                                                         | 293                            |
| DEPARTMENT OF DEFENSE.....             | 76,745  | 106                           | 75,458              | -                                              | 1,032                             | -                                           | 149                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....              | 9,356   | -                             | 8,336               | -                                              | 681                               | -                                           | 26                                           | -                                                         | 313                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....  | 56,736  | 101                           | 99                  | -                                              | 34,587                            | -                                           | 21,058                                       | -                                                         | 891                            |
| DEPARTMENT OF THE INTERIOR.....        | 7,015   | 5,474                         | 1,129               | -                                              | 412                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....      | 2,570   | -                             | 1,660               | -                                              | 30                                | -                                           | -                                            | -                                                         | 880                            |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 10,723  | 6,105                         | 1,249               | -                                              | 1,234                             | -                                           | 4                                            | -                                                         | 2,131                          |
| NATIONAL AERONAUTICS AND SPACE ADMIN.  | 7,913   | 105                           | 5,815               | -                                              | 1,956                             | -                                           | 37                                           | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....       | 5,790   | -                             | -                   | -                                              | 5,576                             | -                                           | 214                                          | -                                                         | -                              |
| <b>MISSOURI</b>                        |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                             | 638,441 | 23,690                        | 535,252             | -                                              | 59,848                            | -                                           | 14,132                                       | 102                                                       | 5,417                          |
| DEPARTMENT OF AGRICULTURE.....         | 7,673   | 3,560                         | -                   | -                                              | 4,113                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....            | 1,057   | 245                           | 11                  | -                                              | 533                               | -                                           | 226                                          | -                                                         | 42                             |
| DEPARTMENT OF DEFENSE.....             | 548,460 | 14,513                        | 529,916             | -                                              | 1,494                             | -                                           | 2,537                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....              | 1,982   | 45                            | 1,073               | -                                              | 804                               | -                                           | 56                                           | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....  | 51,835  | 90                            | 101                 | -                                              | 42,668                            | -                                           | 8,070                                        | -                                                         | 197                            |
| DEPARTMENT OF THE INTERIOR.....        | 5,874   | 4,641                         | 720                 | -                                              | 401                               | -                                           | -                                            | 102                                                       | 10                             |
| DEPARTMENT OF TRANSPORTATION.....      | 5,959   | -                             | 355                 | -                                              | 248                               | -                                           | 188                                          | -                                                         | 5,168                          |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 3,472   | 116                           | 141                 | -                                              | 1,791                             | -                                           | 1,424                                        | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN.  | 4,833   | 476                           | 3,026               | -                                              | 1,331                             | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....       | 7,296   | -                             | -                   | -                                              | 6,465                             | -                                           | 831                                          | -                                                         | -                              |
| <b>NEBRASKA</b>                        |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                             | 24,096  | 7,440                         | 3,024               | -                                              | 13,031                            | -                                           | 100                                          | -                                                         | 501                            |
| DEPARTMENT OF AGRICULTURE.....         | 8,800   | 6,677                         | -                   | -                                              | 2,123                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....            | 191     | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 19                             |
| DEPARTMENT OF DEFENSE.....             | 2,607   | 227                           | 2,240               | -                                              | 140                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....              | 817     | -                             | 750                 | -                                              | 53                                | -                                           | -                                            | -                                                         | 14                             |
| DEPT OF HEALTH, EDUC AND WELFARE.....  | 6,208   | -                             | -                   | -                                              | 7,665                             | -                                           | 100                                          | -                                                         | 463                            |
| DEPARTMENT OF THE INTERIOR.....        | 672     | 535                           | 22                  | -                                              | 115                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....      | 25      | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 25                             |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 78      | -                             | -                   | -                                              | 78                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN.  | 209     | 1                             | 12                  | -                                              | 196                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....       | 2,661   | -                             | -                   | -                                              | 2,661                             | -                                           | -                                            | -                                                         | -                              |

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TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL (1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              | STATE<br>AND<br>LOCAL<br>GOVTS                            |
|-------------------------------------------|-----------|--------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|
|                                           |           |                                |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |
| <b>NORTH DAKOTA</b>                       |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 18,745    | 11,206                         | 2,682               | -                                              | 3,934                             | -                                           | 506                                          | -                                                         |
| DEPARTMENT OF AGRICULTURE.....            | 9,000     | 6,849                          | -                   | -                                              | 2,151                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 118       | -                              | -                   | -                                              | 59                                | -                                           | -                                            | 59                                                        |
| DEPARTMENT OF DEFENSE.....                | 686       | -                              | 6                   | -                                              | 174                               | -                                           | 506                                          | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 5,363     | 2,627                          | 2,676               | -                                              | 60                                | -                                           | -                                            | -                                                         |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 647       | -                              | -                   | -                                              | 358                               | -                                           | -                                            | 289                                                       |
| DEPARTMENT OF THE INTERIOR.....           | 2,367     | 1,730                          | -                   | -                                              | 586                               | -                                           | -                                            | 51                                                        |
| DEPARTMENT OF TRANSPORTATION.....         | 18        | -                              | -                   | -                                              | -                                 | -                                           | -                                            | 18                                                        |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 369       | -                              | -                   | -                                              | 369                               | -                                           | -                                            | -                                                         |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | -         | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 177       | -                              | -                   | -                                              | 177                               | -                                           | -                                            | -                                                         |
| <b>SOUTH DAKOTA</b>                       |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 7,986     | 2,111                          | 2,132               | -                                              | 2,918                             | -                                           | 254                                          | -                                                         |
| DEPARTMENT OF AGRICULTURE.....            | 2,720     | 1,310                          | -                   | -                                              | 1,410                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 19        | -                              | -                   | -                                              | -                                 | -                                           | -                                            | 19                                                        |
| DEPARTMENT OF DEFENSE.....                | 300       | 110                            | 107                 | -                                              | 83                                | -                                           | -                                            | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 2,295     | -                              | 2,025               | -                                              | -                                 | -                                           | 70                                           | 200                                                       |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 831       | -                              | -                   | -                                              | 456                               | -                                           | 111                                          | 264                                                       |
| DEPARTMENT OF THE INTERIOR.....           | 1,093     | 689                            | -                   | -                                              | 404                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF TRANSPORTATION.....         | 46        | -                              | -                   | -                                              | -                                 | -                                           | -                                            | 46                                                        |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 144       | -                              | -                   | -                                              | 51                                | -                                           | 75                                           | 40                                                        |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 252       | 2                              | -                   | -                                              | 250                               | -                                           | -                                            | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 264       | -                              | -                   | -                                              | 264                               | -                                           | -                                            | -                                                         |
| <b>SOUTH ATLANTIC</b>                     |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 4,875,386 | 2,690,974                      | 1,454,357           | 48,626                                         | 392,546                           | 133,319                                     | 82,987                                       | 43,890                                                    |
| DEPARTMENT OF AGRICULTURE.....            | 179,345   | 152,892                        | 84                  | -                                              | 26,269                            | -                                           | 4                                            | 96                                                        |
| DEPARTMENT OF COMMERCE.....               | 104,478   | 88,181                         | 5,942               | -                                              | 4,724                             | 1,051                                       | 2,284                                        | 2,073                                                     |
| DEPARTMENT OF DEFENSE.....                | 2,197,757 | 1,208,989                      | 809,924             | -                                              | 21,382                            | 122,596                                     | 7,536                                        | 29,311                                                    |
| DEPARTMENT OF ENERGY.....                 | 254,774   | 49,568                         | 122,773             | 25,342                                         | 49,487                            | 676                                         | 1,758                                        | 2,811                                                     |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 882,340   | 516,922                        | 82,599              | 23,284                                         | 207,518                           | 95                                          | 43,072                                       | 665                                                       |
| DEPARTMENT OF THE INTERIOR.....           | 49,807    | 42,213                         | 4,154               | -                                              | 3,367                             | -                                           | 3                                            | 70                                                        |
| DEPARTMENT OF TRANSPORTATION.....         | 113,148   | 22,136                         | 62,979              | -                                              | 2,375                             | 470                                         | 989                                          | 10,552                                                    |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 86,715    | 64,110                         | 6,333               | -                                              | 8,833                             | -                                           | 6,188                                        | 270                                                       |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 852,185   | 470,689                        | 355,587             | -                                              | 15,983                            | 75                                          | 9,689                                        | 162                                                       |
| NATIONAL SCIENCE FOUNDATION.....          | 154,817   | 77,874                         | 3,982               | -                                              | 52,608                            | 8,356                                       | 11,464                                       | 50                                                        |
| <b>DELAWARE</b>                           |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 15,271    | 774                            | 7,287               | -                                              | 6,610                             | -                                           | 385                                          | -                                                         |
| DEPARTMENT OF AGRICULTURE.....            | 1,707     | 591                            | -                   | -                                              | 1,116                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 839       | -                              | -                   | -                                              | 817                               | -                                           | -                                            | 22                                                        |
| DEPARTMENT OF DEFENSE.....                | 4,546     | -                              | 5,999               | -                                              | 547                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 1,620     | -                              | 429                 | -                                              | 1,191                             | -                                           | -                                            | -                                                         |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 1,560     | -                              | -                   | -                                              | 982                               | -                                           | 385                                          | 193                                                       |
| DEPARTMENT OF THE INTERIOR.....           | 343       | 176                            | 14                  | -                                              | 153                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF TRANSPORTATION.....         | 271       | -                              | 271                 | -                                              | -                                 | -                                           | -                                            | -                                                         |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 102       | -                              | 44                  | -                                              | 58                                | -                                           | -                                            | -                                                         |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 693       | 7                              | 530                 | -                                              | 156                               | -                                           | -                                            | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 1,590     | -                              | -                   | -                                              | 1,590                             | -                                           | -                                            | -                                                         |
| <b>DISTRICT OF COLUMBIA</b>               |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 729,551   | 474,804                        | 141,377             | -                                              | 68,971                            | 704                                         | 40,458                                       | 50                                                        |
| DEPARTMENT OF AGRICULTURE.....            | 54,951    | 54,656                         | -                   | -                                              | 295                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 11,334    | 7,330                          | 822                 | -                                              | 1,103                             | 704                                         | 1,249                                        | 126                                                       |
| DEPARTMENT OF DEFENSE.....                | 248,095   | 179,581                        | 63,137              | -                                              | 7,264                             | -                                           | 2,113                                        | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 110,259   | 21,923                         | 52,293              | -                                              | 34,926                            | -                                           | 1,048                                        | 69                                                        |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 102,410   | 52,909                         | 9,324               | -                                              | 21,593                            | -                                           | 18,026                                       | 558                                                       |
| DEPARTMENT OF THE INTERIOR.....           | 11,524    | 9,686                          | 1,399               | -                                              | 439                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF TRANSPORTATION.....         | 30,759    | 18,046                         | 9,535               | -                                              | 261                               | -                                           | 483                                          | 2,434                                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 14,615    | 13,091                         | 446                 | -                                              | 103                               | -                                           | 975                                          | -                                                         |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 53,901    | 40,692                         | 2,806               | -                                              | 2,586                             | -                                           | 7,817                                        | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 91,703    | 76,890                         | 1,615               | -                                              | 4,401                             | -                                           | 8,747                                        | 50                                                        |
| <b>FLORIDA</b>                            |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |
| TOTAL.....                                | 919,052   | 430,456                        | 422,253             | -                                              | 55,766                            | -                                           | 3,038                                        | -                                                         |
| DEPARTMENT OF AGRICULTURE.....            | 13,386    | 10,302                         | -                   | -                                              | 3,084                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF COMMERCE.....               | 10,195    | 7,852                          | 688                 | -                                              | 1,235                             | -                                           | 132                                          | 308                                                       |
| DEPARTMENT OF DEFENSE.....                | 540,450   | 262,225                        | 273,000             | -                                              | 5,225                             | -                                           | -                                            | -                                                         |
| DEPARTMENT OF ENERGY.....                 | 12,032    | 150                            | 8,574               | -                                              | 2,026                             | -                                           | 220                                          | 1,062                                                     |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 32,762    | 115                            | 2,855               | -                                              | 26,155                            | -                                           | 2,154                                        | 1,483                                                     |
| DEPARTMENT OF THE INTERIOR.....           | 4,066     | 3,354                          | 334                 | -                                              | 358                               | -                                           | -                                            | -                                                         |
| DEPARTMENT OF TRANSPORTATION.....         | 5,193     | 461                            | 50                  | -                                              | 191                               | -                                           | -                                            | 4,491                                                     |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 7,423     | 3,050                          | 1,107               | -                                              | 2,755                             | -                                           | 316                                          | 195                                                       |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 280,408   | 142,902                        | 135,645             | -                                              | 1,801                             | -                                           | 60                                           | -                                                         |
| NATIONAL SCIENCE FOUNDATION.....          | 13,157    | 65                             | -                   | -                                              | 12,936                            | -                                           | 156                                          | -                                                         |

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TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL (1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|-----------|--------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                           |           |                                |                     | FFROCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFROCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFROCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| <b>GEORGIA</b>                            |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 110,829   | 47,099                         | 15,423              | 2,153                                          | 40,058                            | -                                           | 3,197                                        | -                                                         | 7,895                          |
| DEPARTMENT OF AGRICULTURE.....            | 22,601    | 18,398                         | 191                 | -                                              | 4,184                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 1,568     | 111                            | 86                  | -                                              | 559                               | -                                           | 507                                          | -                                                         | 400                            |
| DEPARTMENT OF DEFENSE.....                | 12,874    | 2,740                          | 7,567               | -                                              | 2,567                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 9,703     | 605                            | 2,663               | 2,153                                          | 4,282                             | -                                           | -                                            | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 37,996    | 14,316                         | 45                  | -                                              | 19,343                            | -                                           | 2,501                                        | -                                                         | 1,789                          |
| DEPARTMENT OF THE INTERIOR.....           | 1,679     | 1,249                          | -                   | -                                              | 426                               | -                                           | -                                            | -                                                         | 4                              |
| DEPARTMENT OF TRANSPORTATION.....         | 1,390     | -                              | 100                 | -                                              | 763                               | -                                           | -                                            | -                                                         | 327                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 8,816     | 7,445                          | 613                 | -                                              | 653                               | -                                           | 105                                          | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 8,201     | 2,333                          | 4,220               | -                                              | 1,648                             | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 5,997     | -                              | 110                 | -                                              | 5,633                             | -                                           | 84                                           | -                                                         | 170                            |
| <b>MARYLAND</b>                           |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 2,030,185 | 1,283,876                      | 495,967             | 23,284                                         | 89,645                            | 124,517                                     | 8,955                                        | -                                                         | 3,961                          |
| DEPARTMENT OF AGRICULTURE.....            | 58,860    | 56,342                         | 64                  | -                                              | 2,454                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 72,712    | 69,447                         | 2,178               | -                                              | 434                               | 347                                         | 33                                           | -                                                         | 273                            |
| DEPARTMENT OF DEFENSE.....                | 883,336   | 547,802                        | 208,362             | -                                              | 4,131                             | 122,596                                     | 445                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 27,336    | 10,008                         | 13,496              | -                                              | 2,778                             | 676                                         | 96                                           | -                                                         | 282                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 576,711   | 431,196                        | 50,200              | 23,284                                         | 62,602                            | 95                                          | 7,516                                        | -                                                         | 1,818                          |
| DEPARTMENT OF THE INTERIOR.....           | 9,811     | 8,705                          | 945                 | -                                              | 161                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 45,133    | 2,240                          | 41,210              | -                                              | 134                               | 470                                         | -                                            | -                                                         | 1,075                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 14,202    | 10,450                         | 2,701               | -                                              | 691                               | -                                           | 50                                           | -                                                         | 310                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 327,581   | 147,250                        | 175,547             | -                                              | 4,340                             | 75                                          | 187                                          | -                                                         | 162                            |
| NATIONAL SCIENCE FOUNDATION.....          | 14,503    | 436                            | 1,244               | -                                              | 11,916                            | 258                                         | 628                                          | -                                                         | 21                             |
| <b>NORTH CAROLINA</b>                     |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 154,682   | 37,278                         | 8,780               | -                                              | 70,692                            | -                                           | 17,011                                       | -                                                         | 921                            |
| DEPARTMENT OF AGRICULTURE.....            | 12,244    | 6,167                          | 1                   | -                                              | 6,076                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 2,854     | 2,008                          | 109                 | -                                              | 413                               | -                                           | 168                                          | -                                                         | 156                            |
| DEPARTMENT OF DEFENSE.....                | 18,125    | 8,586                          | 5,977               | -                                              | 2,136                             | -                                           | 1,424                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 2,529     | 981                            | 779                 | -                                              | 765                               | -                                           | -                                            | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 70,136    | 11,951                         | 804                 | -                                              | 48,344                            | -                                           | 8,609                                        | -                                                         | 628                            |
| DEPARTMENT OF THE INTERIOR.....           | 1,664     | 1,194                          | 95                  | -                                              | 359                               | -                                           | 3                                            | -                                                         | 13                             |
| DEPARTMENT OF TRANSPORTATION.....         | 925       | 15                             | 154                 | -                                              | 445                               | -                                           | 128                                          | -                                                         | 183                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 34,187    | 26,145                         | 572                 | -                                              | 2,868                             | -                                           | 4,582                                        | -                                                         | 20                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 2,075     | 229                            | 289                 | -                                              | 764                               | -                                           | 792                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 9,947     | -                              | -                   | -                                              | 8,521                             | -                                           | 1,305                                        | -                                                         | 121                            |
| <b>SOUTH CAROLINA</b>                     |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 66,997    | 11,373                         | 16,962              | 23,189                                         | 13,626                            | -                                           | 240                                          | -                                                         | 1,687                          |
| DEPARTMENT OF AGRICULTURE.....            | 6,862     | 3,697                          | -                   | -                                              | 3,165                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 504       | 65                             | -                   | -                                              | 15                                | -                                           | 145                                          | -                                                         | 279                            |
| DEPARTMENT OF DEFENSE.....                | 7,916     | 6,693                          | 208                 | -                                              | 996                               | -                                           | -                                            | -                                                         | 15                             |
| DEPARTMENT OF ENERGY.....                 | 40,044    | -                              | 16,293              | 23,189                                         | 490                               | -                                           | -                                            | -                                                         | 72                             |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 6,446     | 37                             | 10                  | -                                              | 5,461                             | -                                           | 95                                           | -                                                         | 843                            |
| DEPARTMENT OF THE INTERIOR.....           | 1,259     | 874                            | -                   | -                                              | 335                               | -                                           | -                                            | -                                                         | 46                             |
| DEPARTMENT OF TRANSPORTATION.....         | 573       | -                              | 45                  | -                                              | 235                               | -                                           | -                                            | -                                                         | 293                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,482     | -                              | 349                 | -                                              | 1,122                             | -                                           | -                                            | -                                                         | 11                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 206       | 7                              | 57                  | -                                              | 142                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 1,709     | -                              | -                   | -                                              | 1,665                             | -                                           | -                                            | -                                                         | 44                             |
| <b>VIRGINIA</b>                           |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 799,166   | 365,022                        | 333,616             | -                                              | 42,024                            | 831                                         | 8,348                                        | 43,840                                                    | 5,485                          |
| DEPARTMENT OF AGRICULTURE.....            | 4,306     | 67                             | -                   | -                                              | 4,139                             | -                                           | 4                                            | -                                                         | 96                             |
| DEPARTMENT OF COMMERCE.....               | 4,438     | 1,488                          | 2,059               | -                                              | 148                               | -                                           | 50                                           | 223                                                       | 170                            |
| DEPARTMENT OF DEFENSE.....                | 480,239   | 199,360                        | 245,508             | -                                              | 2,506                             | -                                           | 3,554                                        | 29,311                                                    | -                              |
| DEPARTMENT OF ENERGY.....                 | 26,592    | 5,068                          | 15,977              | -                                              | 2,314                             | -                                           | 394                                          | 2,581                                                     | 8                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 44,926    | 251                            | 19,356              | -                                              | 21,582                            | -                                           | 2,431                                        | 665                                                       | 641                            |
| DEPARTMENT OF THE INTERIOR.....           | 17,525    | 15,720                         | 1,215               | -                                              | 590                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 27,736    | 1,374                          | 11,514              | -                                              | 212                               | -                                           | 378                                          | 10,552                                                    | 3,706                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 5,747     | 3,949                          | 501                 | -                                              | 442                               | -                                           | 160                                          | 278                                                       | 437                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 179,039   | 137,262                        | 36,473              | -                                              | 4,471                             | -                                           | 833                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 8,618     | 483                            | 1,013               | -                                              | 5,620                             | 831                                         | 944                                          | -                                                         | 127                            |
| <b>WEST VIRGINIA</b>                      |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 49,657    | 20,292                         | 12,692              | -                                              | 5,154                             | 7,267                                       | 1,355                                        | -                                                         | 2,897                          |
| DEPARTMENT OF AGRICULTURE.....            | 4,428     | 2,672                          | -                   | -                                              | 1,756                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 34        | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 34                             |
| DEPARTMENT OF DEFENSE.....                | 176       | -                              | 166                 | -                                              | 10                                | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 24,663    | 10,813                         | 12,269              | -                                              | 715                               | -                                           | -                                            | -                                                         | 866                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 9,393     | 5,545                          | 5                   | -                                              | 1,456                             | -                                           | 1,355                                        | -                                                         | 1,032                          |
| DEPARTMENT OF THE INTERIOR.....           | 1,960     | 1,255                          | 152                 | -                                              | 546                               | -                                           | -                                            | -                                                         | 7                              |
| DEPARTMENT OF TRANSPORTATION.....         | 1,188     | -                              | 100                 | -                                              | 130                               | -                                           | -                                            | -                                                         | 958                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 141       | -                              | -                   | -                                              | 141                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 81        | 7                              | -                   | -                                              | 74                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 7,593     | -                              | -                   | -                                              | 326                               | 7,267                                       | -                                            | -                                                         | -                              |

CONTINUED ON NEXT PAGE

TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL (1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|-----------|--------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                           |           |                                |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| <b>EAST SOUTH CENTRAL</b>                 |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 1,131,040 | 365,279                        | 475,474             | 162,174                                        | 100,996                           | 3,672                                       | 15,834                                       | -                                                         | 7,411                          |
| DEPARTMENT OF AGRICULTURE.....            | 34,721    | 17,473                         | -                   | -                                              | 17,248                            | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 7,094     | 4,485                          | 855                 | -                                              | 1,080                             | -                                           | -                                            | -                                                         | 283                            |
| DEPARTMENT OF DEFENSE.....                | 311,617   | 159,951                        | 145,753             | 37                                             | 5,439                             | -                                           | 437                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 447,937   | 10,330                         | 262,940             | 161,740                                        | 6,764                             | 3,030                                       | 122                                          | -                                                         | 3,011                          |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 76,539    | 3,925                          | 206                 | -                                              | 59,185                            | 642                                         | 10,976                                       | -                                                         | 1,595                          |
| DEPARTMENT OF THE INTERIOR.....           | 9,189     | 7,251                          | 532                 | -                                              | 1,082                             | -                                           | -                                            | -                                                         | 317                            |
| DEPARTMENT OF TRANSPORTATION.....         | 5,054     | 1,509                          | 1,303               | -                                              | 364                               | -                                           | -                                            | -                                                         | 1,876                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 11,107    | 6,875                          | 1,481               | -                                              | 1,242                             | -                                           | 1,234                                        | -                                                         | 275                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 220,623   | 153,636                        | 62,404              | -                                              | 3,611                             | -                                           | 1,172                                        | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 7,159     | 23                             | -                   | 397                                            | 4,979                             | -                                           | 1,504                                        | -                                                         | 254                            |
| <b>ALABAMA</b>                            |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 433,614   | 272,765                        | 121,833             | -                                              | 30,529                            | -                                           | 7,609                                        | -                                                         | 878                            |
| DEPARTMENT OF AGRICULTURE.....            | 6,530     | 1,945                          | -                   | -                                              | 4,585                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 1,787     | 252                            | 601                 | -                                              | 435                               | -                                           | 307                                          | -                                                         | 112                            |
| DEPARTMENT OF DEFENSE.....                | 173,318   | 113,661                        | 58,198              | -                                              | 1,179                             | -                                           | 280                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 29,472    | 7,180                          | 21,431              | -                                              | 747                               | -                                           | 114                                          | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 25,844    | 96                             | 128                 | -                                              | 20,070                            | -                                           | 5,063                                        | -                                                         | 537                            |
| DEPARTMENT OF THE INTERIOR.....           | 2,797     | 2,175                          | 1,281               | -                                              | 394                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 2,225     | 729                            | 1,168               | -                                              | 124                               | -                                           | -                                            | -                                                         | 204                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 2,149     | 616                            | 76                  | -                                              | 378                               | -                                           | 1,079                                        | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 188,416   | 146,161                        | 40,003              | -                                              | 1,566                             | -                                           | 686                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 1,076     | -                              | -                   | -                                              | 1,051                             | -                                           | -                                            | -                                                         | 25                             |
| <b>KENTUCKY</b>                           |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 56,224    | 11,255                         | 22,804              | 37                                             | 14,527                            | -                                           | 2,268                                        | -                                                         | 5,333                          |
| DEPARTMENT OF AGRICULTURE.....            | 5,536     | 1,084                          | -                   | -                                              | 4,452                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 99        | -                              | -                   | -                                              | 80                                | -                                           | -                                            | -                                                         | 19                             |
| DEPARTMENT OF DEFENSE.....                | 7,263     | 6,060                          | 680                 | 37                                             | 466                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 23,958    | -                              | 20,050              | -                                              | 214                               | -                                           | -                                            | -                                                         | 2,894                          |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 10,543    | 2,201                          | 26                  | -                                              | 7,136                             | -                                           | 739                                          | -                                                         | 361                            |
| DEPARTMENT OF THE INTERIOR.....           | 2,607     | 1,787                          | 255                 | -                                              | 253                               | -                                           | -                                            | -                                                         | 312                            |
| DEPARTMENT OF TRANSPORTATION.....         | 1,461     | -                              | -                   | -                                              | 50                                | -                                           | -                                            | -                                                         | 1,411                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,383     | -                              | 993                 | -                                              | 183                               | -                                           | 88                                           | -                                                         | 119                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 503       | 23                             | -                   | -                                              | 480                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 2,871     | -                              | -                   | -                                              | 1,213                             | -                                           | 1,441                                        | -                                                         | 217                            |
| <b>MISSISSIPPI</b>                        |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 95,168    | 60,149                         | 22,824              | -                                              | 11,377                            | -                                           | 458                                          | -                                                         | 360                            |
| DEPARTMENT OF AGRICULTURE.....            | 17,463    | 13,118                         | -                   | -                                              | 4,345                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 4,900     | 4,140                          | 246                 | -                                              | 381                               | -                                           | -                                            | -                                                         | 133                            |
| DEPARTMENT OF DEFENSE.....                | 40,694    | 37,854                         | 2,677               | -                                              | 157                               | -                                           | 61                                           | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 789       | 86                             | -                   | -                                              | 665                               | -                                           | -                                            | -                                                         | 38                             |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 5,071     | -                              | 37                  | -                                              | 4,538                             | -                                           | 435                                          | -                                                         | 61                             |
| DEPARTMENT OF THE INTERIOR.....           | 2,364     | 2,198                          | 49                  | -                                              | 117                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 807       | 760                            | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 27                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 517       | -                              | -                   | -                                              | 428                               | -                                           | 17                                           | -                                                         | 89                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 22,279    | 1,973                          | 19,815              | -                                              | 474                               | -                                           | 17                                           | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 284       | -                              | -                   | -                                              | 272                               | -                                           | -                                            | -                                                         | 12                             |
| <b>TENNESSEE</b>                          |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 546,034   | 21,110                         | 308,013             | 162,137                                        | 44,563                            | 3,672                                       | 5,499                                        | -                                                         | 1,040                          |
| DEPARTMENT OF AGRICULTURE.....            | 5,192     | 1,326                          | -                   | -                                              | 3,866                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 308       | 97                             | 8                   | -                                              | 184                               | -                                           | -                                            | -                                                         | 19                             |
| DEPARTMENT OF DEFENSE.....                | 90,342    | 2,356                          | 84,198              | -                                              | 3,637                             | -                                           | 151                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 393,718   | 3,084                          | 220,650             | 161,740                                        | 5,138                             | 3,030                                       | 81                                           | -                                                         | 79                             |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 35,081    | 1,604                          | 15                  | -                                              | 27,441                            | 642                                         | 4,739                                        | -                                                         | 636                            |
| DEPARTMENT OF THE INTERIOR.....           | 1,421     | 1,098                          | -                   | -                                              | 318                               | -                                           | -                                            | -                                                         | 5                              |
| DEPARTMENT OF TRANSPORTATION.....         | 561       | -                              | 135                 | -                                              | 192                               | -                                           | -                                            | -                                                         | 234                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 7,058     | 6,259                          | 412                 | -                                              | 253                               | -                                           | 67                                           | -                                                         | 67                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 9,425     | 5,279                          | 2,586               | -                                              | 1,091                             | -                                           | 469                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 4,928     | 23                             | -                   | 397                                            | 2,443                             | -                                           | 65                                           | -                                                         | -                              |
| <b>WEST SOUTH CENTRAL</b>                 |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 1,124,937 | 299,656                        | 604,188             | -                                              | 183,470                           | -                                           | 24,423                                       | -                                                         | 13,220                         |
| DEPARTMENT OF AGRICULTURE.....            | 56,509    | 41,145                         | 91                  | -                                              | 15,268                            | -                                           | -                                            | -                                                         | 1                              |
| DEPARTMENT OF COMMERCE.....               | 10,599    | 3,647                          | 2,118               | -                                              | 2,969                             | -                                           | 723                                          | -                                                         | 1,142                          |
| DEPARTMENT OF DEFENSE.....                | 328,373   | 68,678                         | 246,403             | -                                              | 11,168                            | -                                           | 2,124                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 39,146    | 8,389                          | 17,076              | -                                              | 11,163                            | -                                           | 2,377                                        | -                                                         | 141                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 131,201   | 9,777                          | 644                 | -                                              | 104,624                           | -                                           | 12,453                                       | -                                                         | 3,883                          |
| DEPARTMENT OF THE INTERIOR.....           | 9,825     | 5,666                          | 2,257               | -                                              | 1,415                             | -                                           | -                                            | -                                                         | 485                            |
| DEPARTMENT OF TRANSPORTATION.....         | 35,514    | 261                            | 19,257              | -                                              | 5,265                             | -                                           | 3,873                                        | -                                                         | 6,851                          |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 23,432    | 10,458                         | 6,308               | -                                              | 3,408                             | -                                           | 2,728                                        | -                                                         | 530                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 470,264   | 151,622                        | 310,068             | -                                              | 8,429                             | -                                           | 145                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 20,074    | -                              | 126                 | -                                              | 19,761                            | -                                           | -                                            | -                                                         | 197                            |

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TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED -

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL (1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS. |  |
|-------------------------------------------|-----------|--------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|---------------------------------|--|
|                                           |           |                                |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                 |  |
| ARKANSAS                                  |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                 |  |
| TOTAL.....                                | 24,315    | 15,594                         | 536                 | -                                              | 7,535                             | -                                           | 156                                          | -                                                         | 494                             |  |
| DEPARTMENT OF AGRICULTURE.....            | 3,970     | 489                            | -                   | -                                              | 3,481                             | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF COMMERCE.....               | 405       | -                              | 30                  | -                                              | 309                               | -                                           | -                                            | -                                                         | 66                              |  |
| DEPARTMENT OF DEFENSE.....                | 996       | 566                            | 413                 | -                                              | 17                                | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF ENERGY.....                 | 192       | -                              | -                   | -                                              | 192                               | -                                           | -                                            | -                                                         | -                               |  |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 11,904    | 8,875                          | -                   | -                                              | 2,641                             | -                                           | 156                                          | -                                                         | 232                             |  |
| DEPARTMENT OF THE INTERIOR.....           | 1,863     | 1,635                          | -                   | -                                              | 228                               | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF TRANSPORTATION.....         | 96        | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 96                              |  |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 4,205     | 4,000                          | -                   | -                                              | 142                               | -                                           | -                                            | -                                                         | 63                              |  |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 279       | 29                             | 93                  | -                                              | 157                               | -                                           | -                                            | -                                                         | -                               |  |
| NATIONAL SCIENCE FOUNDATION.....          | 405       | -                              | -                   | -                                              | 368                               | -                                           | -                                            | -                                                         | 37                              |  |
| LOUISIANA                                 |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                 |  |
| TOTAL.....                                | 150,357   | 27,010                         | 101,100             | -                                              | 20,981                            | -                                           | 2,279                                        | -                                                         | 4,987                           |  |
| DEPARTMENT OF AGRICULTURE.....            | 24,735    | 21,813                         | 1                   | -                                              | 2,921                             | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF COMMERCE.....               | 1,893     | 27                             | 1,020               | -                                              | 411                               | -                                           | 5                                            | -                                                         | 422                             |  |
| DEPARTMENT OF DEFENSE.....                | 11,098    | 1,090                          | 8,687               | -                                              | 1,315                             | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF ENERGY.....                 | 2,690     | -                              | 1,963               | -                                              | 727                               | -                                           | -                                            | -                                                         | -                               |  |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 16,534    | 807                            | 15                  | -                                              | 12,712                            | -                                           | 1,842                                        | -                                                         | 1,158                           |  |
| DEPARTMENT OF THE INTERIOR.....           | 1,056     | 820                            | -                   | -                                              | 230                               | -                                           | -                                            | -                                                         | 6                               |  |
| DEPARTMENT OF TRANSPORTATION.....         | 3,340     | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 3,340                           |  |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,238     | -                              | -                   | -                                              | 795                               | -                                           | 432                                          | -                                                         | 11                              |  |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 92,028    | 2,447                          | 89,373              | -                                              | 208                               | -                                           | -                                            | -                                                         | -                               |  |
| NATIONAL SCIENCE FOUNDATION.....          | 1,745     | -                              | 33                  | -                                              | 1,662                             | -                                           | -                                            | -                                                         | 50                              |  |
| OKLAHOMA                                  |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                 |  |
| TOTAL.....                                | 47,749    | 21,060                         | 7,700               | -                                              | 13,999                            | -                                           | 3,236                                        | -                                                         | 1,754                           |  |
| DEPARTMENT OF AGRICULTURE.....            | 5,569     | 2,858                          | 23                  | -                                              | 2,688                             | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF COMMERCE.....               | 2,729     | 1,784                          | 185                 | -                                              | 271                               | -                                           | 353                                          | -                                                         | 138                             |  |
| DEPARTMENT OF DEFENSE.....                | 4,270     | 2,206                          | 466                 | -                                              | 1,598                             | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF ENERGY.....                 | 13,057    | 6,836                          | 4,906               | -                                              | 1,268                             | -                                           | -                                            | -                                                         | 47                              |  |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 7,989     | -                              | 3                   | -                                              | 4,697                             | -                                           | 2,883                                        | -                                                         | 406                             |  |
| DEPARTMENT OF THE INTERIOR.....           | 1,592     | 769                            | 593                 | -                                              | 228                               | -                                           | -                                            | -                                                         | 2                               |  |
| DEPARTMENT OF TRANSPORTATION.....         | 2,249     | 175                            | 1,291               | -                                              | 47                                | -                                           | -                                            | -                                                         | 756                             |  |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 7,463     | 6,109                          | 109                 | -                                              | 890                               | -                                           | -                                            | -                                                         | 355                             |  |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 735       | 325                            | 124                 | -                                              | 286                               | -                                           | -                                            | -                                                         | -                               |  |
| NATIONAL SCIENCE FOUNDATION.....          | 2,076     | -                              | -                   | -                                              | 2,026                             | -                                           | -                                            | -                                                         | 50                              |  |
| TEXAS                                     |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                 |  |
| TOTAL.....                                | 896,516   | 235,992                        | 494,832             | -                                              | 140,955                           | -                                           | 18,752                                       | -                                                         | 5,985                           |  |
| DEPARTMENT OF AGRICULTURE.....            | 22,235    | 15,989                         | 67                  | -                                              | 6,178                             | -                                           | -                                            | -                                                         | 1                               |  |
| DEPARTMENT OF COMMERCE.....               | 5,572     | 1,848                          | 875                 | -                                              | 1,978                             | -                                           | 365                                          | -                                                         | 516                             |  |
| DEPARTMENT OF DEFENSE.....                | 312,009   | 64,810                         | 236,837             | -                                              | 8,238                             | -                                           | 2,124                                        | -                                                         | -                               |  |
| DEPARTMENT OF ENERGY.....                 | 23,207    | 1,553                          | 10,207              | -                                              | 8,976                             | -                                           | 2,377                                        | -                                                         | 94                              |  |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 94,774    | 95                             | 446                 | -                                              | 84,574                            | -                                           | 7,572                                        | -                                                         | 2,087                           |  |
| DEPARTMENT OF THE INTERIOR.....           | 5,314     | 2,444                          | 1,664               | -                                              | 729                               | -                                           | -                                            | -                                                         | 477                             |  |
| DEPARTMENT OF TRANSPORTATION.....         | 29,809    | 93                             | 17,966              | -                                              | 5,218                             | -                                           | 3,873                                        | -                                                         | 2,459                           |  |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 10,526    | 349                            | 6,199               | -                                              | 1,581                             | -                                           | 2,294                                        | -                                                         | 101                             |  |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 377,222   | 148,821                        | 220,478             | -                                              | 7,778                             | -                                           | 145                                          | -                                                         | -                               |  |
| NATIONAL SCIENCE FOUNDATION.....          | 15,848    | -                              | 93                  | -                                              | 15,705                            | -                                           | -                                            | -                                                         | 50                              |  |
| MOUNTAIN                                  |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                 |  |
| TOTAL.....                                | 1,719,182 | 442,739                        | 403,448             | 318,360                                        | 150,905                           | 281,044                                     | 25,351                                       | 3,578                                                     | 13,757                          |  |
| DEPARTMENT OF AGRICULTURE.....            | 47,663    | 34,617                         | 393                 | -                                              | 12,647                            | -                                           | -                                            | -                                                         | 6                               |  |
| DEPARTMENT OF COMMERCE.....               | 32,492    | 27,718                         | 1,648               | -                                              | 2,117                             | -                                           | 334                                          | -                                                         | 475                             |  |
| DEPARTMENT OF DEFENSE.....                | 411,271   | 255,869                        | 136,867             | 615                                            | 14,009                            | 1,360                                       | 2,551                                        | -                                                         | -                               |  |
| DEPARTMENT OF ENERGY.....                 | 811,104   | 16,183                         | 201,805             | 317,745                                        | 10,902                            | 249,162                                     | 10,620                                       | 3,578                                                     | 1,509                           |  |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 85,371    | 6,307                          | 1,202               | -                                              | 59,457                            | -                                           | 9,273                                        | -                                                         | 9,052                           |  |
| DEPARTMENT OF THE INTERIOR.....           | 74,016    | 60,534                         | 6,217               | -                                              | 6,777                             | -                                           | -                                            | -                                                         | 483                             |  |
| DEPARTMENT OF TRANSPORTATION.....         | 29,571    | 21,978                         | 5,340               | -                                              | 605                               | -                                           | 115                                          | -                                                         | 1,533                           |  |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 13,206    | 7,699                          | 878                 | -                                              | 4,017                             | -                                           | 288                                          | -                                                         | 324                             |  |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 153,152   | 11,652                         | 128,524             | -                                              | 12,108                            | 50                                          | 818                                          | -                                                         | -                               |  |
| NATIONAL SCIENCE FOUNDATION.....          | 61,256    | 177                            | 416                 | -                                              | 28,666                            | 30,472                                      | 1,352                                        | -                                                         | 175                             |  |
| ARIZONA                                   |           |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                 |  |
| TOTAL.....                                | 141,850   | 39,396                         | 65,028              | -                                              | 26,118                            | 8,700                                       | 1,007                                        | -                                                         | 1,601                           |  |
| DEPARTMENT OF AGRICULTURE.....            | 9,466     | 7,612                          | 2                   | -                                              | 1,852                             | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF COMMERCE.....               | 261       | -                              | 5                   | -                                              | 182                               | -                                           | 19                                           | -                                                         | 55                              |  |
| DEPARTMENT OF DEFENSE.....                | 74,949    | 26,776                         | 45,249              | -                                              | 2,899                             | -                                           | 25                                           | -                                                         | -                               |  |
| DEPARTMENT OF ENERGY.....                 | 8,925     | -                              | 7,916               | -                                              | 839                               | -                                           | -                                            | -                                                         | 170                             |  |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 13,280    | 2,091                          | 3                   | -                                              | 9,663                             | -                                           | 544                                          | -                                                         | 979                             |  |
| DEPARTMENT OF THE INTERIOR.....           | 5,611     | 2,783                          | 2,129               | -                                              | 699                               | -                                           | -                                            | -                                                         | -                               |  |
| DEPARTMENT OF TRANSPORTATION.....         | 819       | -                              | 437                 | -                                              | 104                               | -                                           | -                                            | -                                                         | 372                             |  |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 495       | -                              | 137                 | -                                              | 358                               | -                                           | -                                            | -                                                         | -                               |  |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 12,750    | 136                            | 9,150               | -                                              | 3,149                             | -                                           | 317                                          | -                                                         | -                               |  |
| NATIONAL SCIENCE FOUNDATION.....          | 15,294    | -                              | -                   | -                                              | 6,467                             | 8,700                                       | 102                                          | -                                                         | 25                              |  |

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TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL   | FEDERAL<br>INTRA-<br>MURAL(1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|---------|-------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                           |         |                               |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| <b>COLORADO</b>                           |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 322,537 | 104,159                       | 120,178             | 470                                            | 54,872                            | 21,022                                      | 9,447                                        | 3,578                                                     | 6,811                          |
| DEPARTMENT OF AGRICULTURE.....            | 11,066  | 7,797                         | 232                 | -                                              | 3,037                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 30,530  | 27,440                        | 1,559               | -                                              | 1,175                             | -                                           | 41                                           | -                                                         | 75                             |
| DEPARTMENT OF DEFENSE.....                | 50,804  | 11,946                        | 35,926              | -                                              | 2,754                             | -                                           | 178                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 32,113  | 1,217                         | 22,947              | 470                                            | 3,005                             | -                                           | 506                                          | 3,578                                                     | 390                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 36,819  | 85                            | 599                 | -                                              | 23,338                            | -                                           | 7,131                                        | -                                                         | 5,466                          |
| DEPARTMENT OF THE INTERIOR.....           | 34,579  | 29,855                        | 2,983               | -                                              | 1,645                             | -                                           | -                                            | -                                                         | 96                             |
| DEPARTMENT OF TRANSPORTATION.....         | 27,405  | 21,676                        | 4,898               | -                                              | 354                               | -                                           | -                                            | -                                                         | 477                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 3,358   | 454                           | 480                 | -                                              | 2,208                             | -                                           | -                                            | -                                                         | 82                             |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 60,575  | 5,272                         | 50,403              | -                                              | 4,402                             | 50                                          | 448                                          | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 35,288  | 177                           | 151                 | -                                              | 12,954                            | 20,972                                      | 1,009                                        | -                                                         | 25                             |
| <b>IDAH0</b>                              |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 118,740 | 8,437                         | 7,168               | 76,424                                         | 5,943                             | 19,207                                      | 439                                          | -                                                         | 1,124                          |
| DEPARTMENT OF AGRICULTURE.....            | 6,243   | 4,396                         | -                   | -                                              | 1,841                             | -                                           | -                                            | -                                                         | 6                              |
| DEPARTMENT OF COMMERCE.....               | 116     | -                             | -                   | -                                              | 5                                 | -                                           | -                                            | -                                                         | 111                            |
| DEPARTMENT OF DEFENSE.....                | 3,870   | 1,139                         | 250                 | -                                              | 2,481                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 104,025 | 550                           | 6,733               | 76,424                                         | 340                               | 19,207                                      | -                                            | -                                                         | 771                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 949     | -                             | -                   | -                                              | 315                               | -                                           | 439                                          | -                                                         | 195                            |
| DEPARTMENT OF THE INTERIOR.....           | 3,130   | 2,352                         | 131                 | -                                              | 655                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 16      | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 16                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 105     | -                             | 52                  | -                                              | 53                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | -       | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 278     | -                             | -                   | -                                              | 253                               | -                                           | -                                            | -                                                         | 25                             |
| <b>MONTANA</b>                            |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 45,471  | 14,781                        | 23,977              | -                                              | 5,181                             | -                                           | 112                                          | -                                                         | 1,420                          |
| DEPARTMENT OF AGRICULTURE.....            | 9,735   | 8,031                         | 140                 | -                                              | 1,564                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 321     | -                             | 4                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 317                            |
| DEPARTMENT OF DEFENSE.....                | 1,124   | -                             | 1,094               | -                                              | 18                                | -                                           | 12                                           | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 22,555  | 65                            | 22,152              | -                                              | 338                               | -                                           | -                                            | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 4,997   | 3,503                         | 52                  | -                                              | 773                               | -                                           | 100                                          | -                                                         | 569                            |
| DEPARTMENT OF THE INTERIOR.....           | 4,726   | 3,182                         | 535                 | -                                              | 777                               | -                                           | -                                            | -                                                         | 232                            |
| DEPARTMENT OF TRANSPORTATION.....         | 35      | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 35                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,151   | -                             | -                   | -                                              | 909                               | -                                           | -                                            | -                                                         | 242                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 33      | -                             | -                   | -                                              | 33                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 794     | -                             | -                   | -                                              | 769                               | -                                           | -                                            | -                                                         | 25                             |
| <b>NEVADA</b>                             |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 183,320 | 43,235                        | 126,749             | 2,290                                          | 3,744                             | 1,466                                       | 5,390                                        | -                                                         | 646                            |
| DEPARTMENT OF AGRICULTURE.....            | 1,408   | 637                           | -                   | -                                              | 771                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 70      | -                             | -                   | -                                              | -                                 | -                                           | 51                                           | -                                                         | 19                             |
| DEPARTMENT OF DEFENSE.....                | 23,484  | 22,589                        | 533                 | -                                              | 366                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 140,304 | 6,187                         | 124,892             | 2,290                                          | 536                               | 1,466                                       | 5,133                                        | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 1,072   | -                             | -                   | -                                              | 491                               | -                                           | 14                                           | -                                                         | 567                            |
| DEPARTMENT OF THE INTERIOR.....           | 7,158   | 6,633                         | 39                  | -                                              | 486                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 115     | -                             | 5                   | -                                              | 50                                | -                                           | -                                            | -                                                         | 60                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 7,182   | 7,120                         | -                   | -                                              | 62                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 1,641   | 73                            | 1,280               | -                                              | 288                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 886     | -                             | -                   | -                                              | 694                               | -                                           | 192                                          | -                                                         | -                              |
| <b>NEW MEXICO</b>                         |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 750,865 | 190,974                       | 62,681              | 239,176                                        | 18,850                            | 230,649                                     | 7,795                                        | -                                                         | 740                            |
| DEPARTMENT OF AGRICULTURE.....            | 2,391   | 1,154                         | -                   | -                                              | 1,237                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 721     | 38                            | -                   | -                                              | 400                               | -                                           | 223                                          | -                                                         | 60                             |
| DEPARTMENT OF DEFENSE.....                | 231,496 | 179,884                       | 43,717              | 615                                            | 3,584                             | 1,360                                       | 2,336                                        | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 479,000 | -                             | 6,212               | 238,561                                        | 823                               | 228,489                                     | 4,831                                        | -                                                         | 84                             |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 9,064   | 568                           | 32                  | -                                              | 7,872                             | -                                           | 149                                          | -                                                         | 443                            |
| DEPARTMENT OF THE INTERIOR.....           | 3,768   | 3,394                         | -                   | -                                              | 270                               | -                                           | -                                            | -                                                         | 104                            |
| DEPARTMENT OF TRANSPORTATION.....         | 398     | 302                           | -                   | -                                              | 72                                | -                                           | -                                            | -                                                         | 24                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 495     | 125                           | -                   | -                                              | 216                               | -                                           | 154                                          | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 20,786  | 5,509                         | 12,720              | -                                              | 2,504                             | -                                           | 53                                           | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 2,746   | -                             | -                   | -                                              | 1,872                             | 800                                         | 49                                           | -                                                         | 25                             |
| <b>UTAH</b>                               |         |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 132,324 | 25,286                        | 73,910              | -                                              | 30,907                            | -                                           | 1,161                                        | -                                                         | 1,060                          |
| DEPARTMENT OF AGRICULTURE.....            | 5,420   | 4,128                         | 19                  | -                                              | 1,273                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 454     | -                             | 80                  | -                                              | 355                               | -                                           | -                                            | -                                                         | 19                             |
| DEPARTMENT OF DEFENSE.....                | 25,327  | 13,539                        | 10,098              | -                                              | 1,690                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 11,673  | -                             | 7,274               | -                                              | 4,155                             | -                                           | 150                                          | -                                                         | 94                             |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 18,584  | 60                            | 596                 | -                                              | 16,655                            | -                                           | 896                                          | -                                                         | 337                            |
| DEPARTMENT OF THE INTERIOR.....           | 8,447   | 6,895                         | 400                 | -                                              | 1,101                             | -                                           | -                                            | -                                                         | 51                             |
| DEPARTMENT OF TRANSPORTATION.....         | 634     | -                             | -                   | -                                              | 10                                | -                                           | 115                                          | -                                                         | 509                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 244     | -                             | 209                 | -                                              | 35                                | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 56,385  | 664                           | 54,971              | -                                              | 750                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 5,156   | -                             | 263                 | -                                              | 4,843                             | -                                           | -                                            | -                                                         | 50                             |

TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL     | FEDERAL<br>INTRA-<br>MURAL(1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|-----------|-------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                           |           |                               |                     | FEDRCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FEDRCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FEDRCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| <b>WYOMING</b>                            |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 23,875    | 14,471                        | 3,759               | -                                              | 5,290                             | -                                           | -                                            | -                                                         | 355                            |
| DEPARTMENT OF AGRICULTURE.....            | 1,934     | 862                           | -                   | -                                              | 1,072                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 19        | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 19                             |
| DEPARTMENT OF DEFENSE.....                | 217       | -                             | -                   | -                                              | 217                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 12,389    | 8,104                         | 3,759               | -                                              | 466                               | -                                           | -                                            | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 606       | -                             | -                   | -                                              | 310                               | -                                           | -                                            | -                                                         | 296                            |
| DEPARTMENT OF THE INTERIOR.....           | 6,589     | 5,445                         | -                   | -                                              | 1,144                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 149       | -                             | -                   | -                                              | 109                               | -                                           | -                                            | -                                                         | 40                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 176       | -                             | -                   | -                                              | 176                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 982       | -                             | -                   | -                                              | 982                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 814       | -                             | -                   | -                                              | 814                               | -                                           | -                                            | -                                                         | -                              |
| <b>PACIFIC</b>                            |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 7,142,218 | 805,746                       | 4,770,974           | 220,006                                        | 547,164                           | 452,750                                     | 130,453                                      | 165,430                                                   | 49,695                         |
| DEPARTMENT OF AGRICULTURE.....            | 40,734    | 47,012                        | 371                 | -                                              | 12,835                            | -                                           | 84                                           | 173                                                       | 259                            |
| DEPARTMENT OF COMMERCE.....               | 37,481    | 22,372                        | 3,583               | -                                              | 6,850                             | 75                                          | 1,210                                        | -                                                         | 3,391                          |
| DEPARTMENT OF DEFENSE.....                | 3,827,876 | 547,329                       | 3,113,961           | -                                              | 51,027                            | 5,153                                       | 19,741                                       | 90,576                                                    | 89                             |
| DEPARTMENT OF ENERGY.....                 | 888,224   | 5,534                         | 207,590             | 220,006                                        | 28,288                            | 350,972                                     | 1,583                                        | 70,398                                                    | 3,853                          |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 413,657   | 2,091                         | 10,875              | -                                              | 277,021                           | 4,068                                       | 98,132                                       | 1,892                                                     | 19,578                         |
| DEPARTMENT OF THE INTERIOR.....           | 57,334    | 44,860                        | 7,040               | -                                              | 5,003                             | -                                           | 47                                           | 100                                                       | 284                            |
| DEPARTMENT OF TRANSPORTATION.....         | 52,733    | 1,017                         | 31,729              | -                                              | 2,263                             | 249                                         | 383                                          | -                                                         | 17,092                         |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 57,305    | 9,135                         | 34,290              | -                                              | 7,718                             | -                                           | 1,616                                        | 407                                                       | 4,134                          |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 1,604,677 | 125,122                       | 1,356,369           | -                                              | 29,139                            | 91,584                                      | 954                                          | 1,461                                                     | 48                             |
| NATIONAL SCIENCE FOUNDATION.....          | 142,197   | 1,274                         | 5,166               | -                                              | 127,020                           | 649                                         | 6,703                                        | 423                                                       | 962                            |
| <b>ALASKA</b>                             |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 35,008    | 22,283                        | 1,172               | -                                              | 9,991                             | -                                           | 182                                          | -                                                         | 2,180                          |
| DEPARTMENT OF AGRICULTURE.....            | 3,290     | 2,444                         | -                   | -                                              | 846                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 4,072     | 3,358                         | 5                   | -                                              | 2                                 | -                                           | -                                            | -                                                         | 707                            |
| DEPARTMENT OF DEFENSE.....                | 9,442     | 5,889                         | 719                 | -                                              | 2,827                             | -                                           | 7                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 752       | -                             | -                   | -                                              | 512                               | -                                           | -                                            | -                                                         | 240                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 1,545     | -                             | 9                   | -                                              | 560                               | -                                           | 175                                          | -                                                         | 801                            |
| DEPARTMENT OF THE INTERIOR.....           | 10,485    | 10,137                        | -                   | -                                              | 348                               | -                                           | -                                            | -                                                         | 288                            |
| DEPARTMENT OF TRANSPORTATION.....         | 288       | -                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 144                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 495       | -                             | -                   | -                                              | 351                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 1,238     | 455                           | 439                 | -                                              | 344                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 4,201     | -                             | -                   | -                                              | 4,201                             | -                                           | -                                            | -                                                         | -                              |
| <b>CALIFORNIA</b>                         |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 6,106,557 | 703,544                       | 4,231,097           | 71,655                                         | 406,641                           | 452,750                                     | 104,889                                      | 99,118                                                    | 36,863                         |
| DEPARTMENT OF AGRICULTURE.....            | 33,188    | 28,048                        | 181                 | -                                              | 4,709                             | -                                           | 16                                           | 173                                                       | 61                             |
| DEPARTMENT OF COMMERCE.....               | 12,999    | 5,237                         | 2,792               | -                                              | 2,838                             | 75                                          | 1,095                                        | -                                                         | 962                            |
| DEPARTMENT OF DEFENSE.....                | 3,321,653 | 518,461                       | 2,651,210           | -                                              | 37,847                            | 5,153                                       | 19,289                                       | 89,693                                                    | -                              |
| DEPARTMENT OF ENERGY.....                 | 632,039   | 2,419                         | 174,618             | 71,655                                         | 21,585                            | 350,972                                     | 1,284                                        | 6,293                                                     | 3,213                          |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 315,610   | 1,021                         | 10,844              | -                                              | 210,862                           | 4,068                                       | 74,307                                       | 1,034                                                     | 13,474                         |
| DEPARTMENT OF THE INTERIOR.....           | 30,541    | 21,322                        | 6,175               | -                                              | 2,725                             | -                                           | 47                                           | 92                                                        | 180                            |
| DEPARTMENT OF TRANSPORTATION.....         | 38,333    | 1,017                         | 19,435              | -                                              | 1,843                             | 249                                         | 271                                          | -                                                         | 15,518                         |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 44,076    | 894                           | 34,290              | -                                              | 4,308                             | -                                           | 1,291                                        | 407                                                       | 2,886                          |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 1,569,088 | 124,147                       | 1,327,126           | -                                              | 24,027                            | 91,584                                      | 954                                          | 1,202                                                     | 48                             |
| NATIONAL SCIENCE FOUNDATION.....          | 109,030   | 978                           | 4,426               | -                                              | 95,897                            | 649                                         | 6,335                                        | 224                                                       | 521                            |
| <b>HAWAII</b>                             |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 38,914    | 6,706                         | 9,041               | -                                              | 19,088                            | -                                           | 1,735                                        | -                                                         | 351                            |
| DEPARTMENT OF AGRICULTURE.....            | 3,116     | 1,648                         | -                   | -                                              | 1,441                             | -                                           | 27                                           | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 2,987     | 1,793                         | 21                  | -                                              | 1,034                             | -                                           | 85                                           | -                                                         | 54                             |
| DEPARTMENT OF DEFENSE.....                | 12,899    | 1,349                         | 7,905               | -                                              | 3,472                             | -                                           | 173                                          | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 2,059     | -                             | 1,023               | -                                              | 834                               | -                                           | -                                            | -                                                         | 202                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 6,827     | 498                           | -                   | -                                              | 5,126                             | -                                           | 1,173                                        | -                                                         | 30                             |
| DEPARTMENT OF THE INTERIOR.....           | 1,500     | 1,718                         | -                   | -                                              | 182                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 59        | -                             | 19                  | -                                              | -                                 | -                                           | -                                            | -                                                         | 40                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 184       | -                             | -                   | -                                              | 184                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 2,688     | 100                           | 73                  | -                                              | 2,515                             | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 4,595     | -                             | -                   | -                                              | 4,293                             | -                                           | 277                                          | -                                                         | 25                             |
| <b>OREGON</b>                             |           |                               |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 84,320    | 28,923                        | 4,592               | -                                              | 38,606                            | -                                           | 9,938                                        | -                                                         | 2,261                          |
| DEPARTMENT OF AGRICULTURE.....            | 12,322    | 9,371                         | 150                 | -                                              | 2,791                             | -                                           | -                                            | -                                                         | 10                             |
| DEPARTMENT OF COMMERCE.....               | 3,261     | 1,339                         | 64                  | -                                              | 1,205                             | -                                           | -                                            | -                                                         | 653                            |
| DEPARTMENT OF DEFENSE.....                | 3,999     | 1,159                         | 113                 | -                                              | 2,715                             | -                                           | 12                                           | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 7,808     | 3,003                         | 2,156               | -                                              | 2,451                             | -                                           | -                                            | -                                                         | 198                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 27,661    | -                             | 17                  | -                                              | 17,168                            | -                                           | 9,926                                        | -                                                         | 550                            |
| DEPARTMENT OF THE INTERIOR.....           | 6,409     | 5,922                         | 187                 | -                                              | 300                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 1,394     | -                             | 340                 | -                                              | 385                               | -                                           | -                                            | -                                                         | 669                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 9,360     | 8,025                         | -                   | -                                              | 1,197                             | -                                           | -                                            | -                                                         | 138                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 2,330     | 104                           | 1,290               | -                                              | 936                               | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 9,776     | -                             | 275                 | -                                              | 9,458                             | -                                           | -                                            | -                                                         | 43                             |

CONTINUED ON NEXT PAGE

TABLE C-103. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

- CONTINUED

| GEOGRAPHIC DIVISION, STATE, AND AGENCY    | TOTAL   | FEDERAL<br>INTRA-<br>MURAL (1) | INDUSTRIAL<br>FIRMS | EXTRAMURAL                                     |                                   |                                             |                                              |                                                           | STATE<br>AND<br>LOCAL<br>GOVTS |
|-------------------------------------------|---------|--------------------------------|---------------------|------------------------------------------------|-----------------------------------|---------------------------------------------|----------------------------------------------|-----------------------------------------------------------|--------------------------------|
|                                           |         |                                |                     | FFRDCS<br>ADMIN BY<br>INDUS-<br>TRIAL<br>FIRMS | UNIVER-<br>SITIES AND<br>COLLEGES | FFRDCS<br>ADMIN BY<br>UNIVS AND<br>COLLEGES | OTHER<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS | FFRDCS<br>ADMIN BY<br>NON-<br>PROFIT<br>INSTITU-<br>TIONS |                                |
| WASHINGTON                                |         |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 878,619 | 44,290                         | 525,072             | 148,351                                        | 72,845                            | -                                           | 13,709                                       | 66,312                                                    | 8,040                          |
| DEPARTMENT OF AGRICULTURE.....            | 8,818   | 5,501                          | 401                 | -                                              | 3,048                             | -                                           | 41                                           | -                                                         | 188                            |
| DEPARTMENT OF COMMERCE.....               | 14,162  | 10,645                         | 701                 | -                                              | 1,771                             | -                                           | 30                                           | -                                                         | 1,015                          |
| DEPARTMENT OF DEFENSE.....                | 479,883 | 20,471                         | 454,014             | -                                              | 4,166                             | -                                           | 260                                          | 883                                                       | 89                             |
| DEPARTMENT OF ENERGY.....                 | 245,566 | 112                            | 29,793              | 148,351                                        | 2,906                             | -                                           | 299                                          | 64,105                                                    | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 52,014  | 57                             | 51                  | -                                              | 43,305                            | -                                           | 12,551                                       | 858                                                       | 4,723                          |
| DEPARTMENT OF THE INTERIOR.....           | 8,399   | 6,161                          | 678                 | -                                              | 1,448                             | -                                           | -                                            | 81                                                        | 104                            |
| DEPARTMENT OF TRANSPORTATION.....         | 12,659  | -                              | 11,935              | -                                              | 351                               | -                                           | 112                                          | -                                                         | 577                            |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 3,190   | 216                            | -                   | -                                              | 1,678                             | -                                           | 325                                          | -                                                         | 971                            |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 29,333  | 316                            | 27,441              | -                                              | 1,317                             | -                                           | -                                            | 259                                                       | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 14,595  | 296                            | 465                 | -                                              | 13,171                            | -                                           | 91                                           | 199                                                       | 373                            |
| OUTLYING AREAS                            |         |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 47,717  | 9,820                          | 23,685              | -                                              | 8,584                             | 3,898                                       | 480                                          | -                                                         | 1,250                          |
| DEPARTMENT OF AGRICULTURE.....            | 4,296   | 1,238                          | 92                  | -                                              | 2,966                             | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 696     | 97                             | 81                  | -                                              | 13                                | -                                           | -                                            | -                                                         | 576                            |
| DEPARTMENT OF DEFENSE.....                | 16,368  | 3,724                          | 12,644              | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF ENERGY.....                 | 12,577  | 35                             | 10,941              | -                                              | 1,378                             | -                                           | -                                            | -                                                         | 223                            |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 4,746   | 175                            | -                   | -                                              | 3,698                             | -                                           | 480                                          | -                                                         | 393                            |
| DEPARTMENT OF THE INTERIOR.....           | 4,697   | 4,517                          | -                   | -                                              | 180                               | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | 58      | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 58                             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | -       | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 34      | 34                             | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 4,247   | -                              | -                   | -                                              | 349                               | 3,898                                       | -                                            | -                                                         | -                              |
| OFFICES ABROAD                            |         |                                |                     |                                                |                                   |                                             |                                              |                                                           |                                |
| TOTAL.....                                | 38,624  | 24,707                         | 2,254               | -                                              | 422                               | 3,500                                       | 7,200                                        | 510                                                       | 31                             |
| DEPARTMENT OF AGRICULTURE.....            | -       | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF COMMERCE.....               | 31      | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | 31                             |
| DEPARTMENT OF DEFENSE.....                | 5,279   | 3,397                          | 1,285               | -                                              | 87                                | -                                           | -                                            | 510                                                       | -                              |
| DEPARTMENT OF ENERGY.....                 | 6,698   | -                              | -                   | -                                              | -                                 | -                                           | 6,698                                        | -                                                         | -                              |
| DEPT OF HEALTH, EDUC AND WELFARE.....     | 106     | -                              | -                   | -                                              | -                                 | -                                           | 106                                          | -                                                         | -                              |
| DEPARTMENT OF THE INTERIOR.....           | 924     | 426                            | 447                 | -                                              | 51                                | -                                           | -                                            | -                                                         | -                              |
| DEPARTMENT OF TRANSPORTATION.....         | -       | -                              | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 1,202   | -                              | 522                 | -                                              | 284                               | -                                           | 396                                          | -                                                         | -                              |
| NATIONAL AERONAUTICS AND SPACE ADMIN..... | 20,884  | 20,884                         | -                   | -                                              | -                                 | -                                           | -                                            | -                                                         | -                              |
| NATIONAL SCIENCE FOUNDATION.....          | 3,500   | -                              | -                   | -                                              | -                                 | 3,500                                       | -                                            | -                                                         | -                              |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION.

NOTE: THE OBLIGATIONS OF THE TEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&D OBLIGATIONS IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-104. FEDERAL OBLIGATIONS FOR R&D PLANT, BY GEOGRAPHIC DIVISION, STATE, AND PERFORMER SUPPORTED: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| GEOGRAPHIC DIVISION AND STATE | TOTAL     | FEDERAL INTRA-MURAL | INDUS-TRIAL FIRMS | FFRDCS ADMIN BY INDUS-TRIAL FIRMS | UNIVER-SITIES AND COLLEGES | EXTRAMURAL                         |                               |                                         | STATE AND LOCAL GOVTS |
|-------------------------------|-----------|---------------------|-------------------|-----------------------------------|----------------------------|------------------------------------|-------------------------------|-----------------------------------------|-----------------------|
|                               |           |                     |                   |                                   |                            | FFRDCS ADMIN BY UNIVS AND COLLEGES | OTHER NONPROFIT INSTITU-TIONS | FFRDCS ADMIN BY NONPROFIT INSTITU-TIONS |                       |
| TOTAL, ALL STATES.....        | 1,334,006 | 702,010             | 98,393            | 210,377                           | 33,603                     | 276,462                            | 6,633                         | 3,848                                   | 600                   |
| NEW ENGLAND.....              | 30,078    | 22,686              | 2,241             | 270                               | 7,814                      | 140                                | 2,927                         | -                                       | -                     |
| CONNECTICUT.....              | 3,943     | 1,148               | 1,260             | 270                               | 1,265                      | -                                  | -                             | -                                       | -                     |
| MAINE.....                    | 50        | -                   | -                 | -                                 | 50                         | -                                  | -                             | -                                       | -                     |
| MASSACHUSETTS.....            | 24,391    | 14,044              | 981               | -                                 | 6,299                      | 140                                | 2,927                         | -                                       | -                     |
| NEW HAMPSHIRE.....            | 2,432     | 2,432               | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| RHODE ISLAND.....             | 5,262     | 5,062               | -                 | -                                 | 200                        | -                                  | -                             | -                                       | -                     |
| VERMONT.....                  | -         | -                   | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| MIDDLE ATLANTIC.....          | 133,927   | 15,390              | 7,019             | 24,772                            | 11,434                     | 73,301                             | 1,411                         | -                                       | 600                   |
| NEW JERSEY.....               | 64,817    | 5,533               | 910               | -                                 | 93                         | 58,281                             | -                             | -                                       | -                     |
| NEW YORK.....                 | 60,997    | 8,648               | 5,304             | 18,796                            | 11,138                     | 15,020                             | 1,411                         | -                                       | 600                   |
| PENNSYLVANIA.....             | 8,113     | 1,209               | 725               | 5,976                             | 203                        | -                                  | -                             | -                                       | -                     |
| EAST NORTH CENTRAL.....       | 114,544   | 65,084              | 8,395             | 851                               | 3,884                      | 36,350                             | -                             | -                                       | -                     |
| ILLINOIS.....                 | 52,021    | 6,263               | 8,372             | -                                 | 1,036                      | 36,350                             | -                             | -                                       | -                     |
| INDIANA.....                  | 570       | 131                 | -                 | -                                 | 439                        | -                                  | -                             | -                                       | -                     |
| MICHIGAN.....                 | 1,051     | 315                 | 23                | -                                 | 713                        | -                                  | -                             | -                                       | -                     |
| OHIO.....                     | 60,390    | 57,843              | -                 | 851                               | 1,696                      | -                                  | -                             | -                                       | -                     |
| WISCONSIN.....                | 532       | 532                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| WEST NORTH CENTRAL.....       | 3,588     | 1,923               | 405               | -                                 | 24                         | 1,236                              | -                             | -                                       | -                     |
| IOWA.....                     | 1,480     | 224                 | -                 | -                                 | -                          | 1,236                              | -                             | -                                       | -                     |
| KANSAS.....                   | 61        | 37                  | -                 | -                                 | 24                         | -                                  | -                             | -                                       | -                     |
| MINNESOTA.....                | 383       | 178                 | 205               | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| MISSOURI.....                 | 872       | 672                 | 200               | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| NEBRASKA.....                 | 197       | 197                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| NORTH DAKOTA.....             | 611       | 611                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| SOUTH DAKOTA.....             | 4         | 4                   | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| SOUTH ATLANTIC.....           | 358,498   | 337,584             | 2,628             | 1,092                             | 4,890                      | 12,256                             | 48                            | -                                       | -                     |
| DELAWARE.....                 | 11        | 11                  | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| DISTRICT OF COLUMBIA....      | 11,324    | 7,289               | 25                | -                                 | 4,010                      | -                                  | -                             | -                                       | -                     |
| FLORIDA.....                  | 155,226   | 154,854             | 372               | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| GEORGIA.....                  | 1,176     | 426                 | -                 | 290                               | 460                        | -                                  | -                             | -                                       | -                     |
| MARYLAND.....                 | 80,390    | 78,563              | 1,379             | -                                 | 400                        | -                                  | 48                            | -                                       | -                     |
| NORTH CAROLINA.....           | 66,762    | 66,302              | 440               | -                                 | 20                         | -                                  | -                             | -                                       | -                     |
| SOUTH CAROLINA.....           | 2,218     | 1,281               | 135               | 602                               | -                          | -                                  | -                             | -                                       | -                     |
| VIRGINIA.....                 | 24,732    | 24,455              | 277               | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| WEST VIRGINIA.....            | 16,659    | 4,403               | -                 | -                                 | -                          | 12,256                             | -                             | -                                       | -                     |
| EAST SOUTH CENTRAL.....       | 54,679    | 20,987              | 2,884             | 30,232                            | 174                        | 402                                | -                             | -                                       | -                     |
| ALABAMA.....                  | 5,337     | 5,337               | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| KENTUCKY.....                 | -         | -                   | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| MISSISSIPPI.....              | 11,535    | 11,535              | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| TENNESSEE.....                | 37,807    | 4,115               | 2,884             | 30,232                            | 174                        | 402                                | -                             | -                                       | -                     |
| WEST SOUTH CENTRAL.....       | 17,238    | 14,971              | 169               | -                                 | 2,098                      | -                                  | -                             | -                                       | -                     |
| ARKANSAS.....                 | 2,793     | 793                 | -                 | -                                 | 2,000                      | -                                  | -                             | -                                       | -                     |
| LOUISIANA.....                | 3,625     | 3,625               | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| OKLAHOMA.....                 | 385       | 385                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| TEXAS.....                    | 10,435    | 10,168              | 169               | -                                 | 98                         | -                                  | -                             | -                                       | -                     |
| MOUNTAIN.....                 | 195,572   | 40,155              | 37,706            | 52,240                            | 312                        | 63,924                             | 1,233                         | -                                       | -                     |
| ARIZONA.....                  | 1,550     | 89                  | 545               | -                                 | -                          | 916                                | -                             | -                                       | -                     |
| COLORADO.....                 | 12,899    | 8,386               | 213               | -                                 | -                          | 4,100                              | -                             | -                                       | -                     |
| IDAH0.....                    | 26,073    | 49                  | 12,172            | 13,852                            | -                          | -                                  | -                             | -                                       | -                     |
| MONTANA.....                  | 818       | 818                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| NEVADA.....                   | 14,750    | 534                 | 14,149            | -                                 | 75                         | -                                  | -                             | -                                       | -                     |
| NEW MEXICO.....               | 137,916   | 48,930              | 10,453            | 38,388                            | 4                          | 58,908                             | 1,233                         | -                                       | -                     |
| UTAH.....                     | 1,502     | 1,093               | 176               | -                                 | 233                        | -                                  | -                             | -                                       | -                     |
| WYOMING.....                  | 256       | 256                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| PACIFIC.....                  | 417,808   | 181,643             | 36,944            | 100,920                           | 3,053                      | 88,386                             | 1,014                         | 3,848                                   | -                     |
| ALASKA.....                   | 620       | 329                 | -                 | -                                 | 291                        | -                                  | -                             | -                                       | -                     |
| CALIFORNIA.....               | 303,285   | 160,540             | 25,281            | 5,369                             | 2,695                      | 88,386                             | 1,014                         | -                                       | -                     |
| HAWAII.....                   | 484       | 484                 | -                 | -                                 | -                          | -                                  | -                             | -                                       | -                     |
| OREGON.....                   | 33        | 21                  | -                 | -                                 | 12                         | -                                  | -                             | -                                       | -                     |
| WASHINGTON.....               | 113,386   | 269                 | 11,663            | 95,551                            | 55                         | -                                  | -                             | 3,848                                   | -                     |
| OUTLYING AREAS.....           | 135       | 115                 | -                 | -                                 | -                          | 20                                 | -                             | -                                       | -                     |
| OFFICES ABROAD.....           | 1,919     | 1,472               | -                 | -                                 | -                          | 447                                | -                             | -                                       | -                     |

NOTE: THE OBLIGATIONS OF THE TEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&D PLANT OBLIGATIONS IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-109. FEDERAL OBLIGATIONS FOR R&amp;D PLANT, BY GEOGRAPHIC DIVISION, STATE, AND AGENCY: FISCAL YEAR 1977

(THOUSANDS OF DOLLARS)

| GEOGRAPHIC DIVISION AND STATE | TOTAL     | DEPT OF AGRICULTURE | DEPT OF COMMERCE | DEPT OF DEFENSE | DEPT OF ENERGY | DEPT OF HEALTH, EDUC & WELFARE | DEPT OF THE INTERIOR | DEPT OF TRANSPORTATION | ENVIRONMENTAL PROTECTION AGENCY | NATIONAL AERONAUTICS & SPACE ADMIN | NATIONAL SCIENCE FOUNDATION |
|-------------------------------|-----------|---------------------|------------------|-----------------|----------------|--------------------------------|----------------------|------------------------|---------------------------------|------------------------------------|-----------------------------|
| TOTAL, ALL STATES.....        | 1,334,006 | 12,908              | 7,090            | 445,600         | 561,017        | 132,640                        | 4,972                | 22,500                 | 2,110                           | 118,090                            | 27,079                      |
| NEW ENGLAND.....              | 36,078    | -                   | -                | 23,347          | 4,715          | 5,429                          | -                    | 1,850                  | 339                             | 348                                | 50                          |
| CONNECTICUT.....              | 3,943     | -                   | -                | 548             | 481            | 1,064                          | -                    | 1,850                  | -                               | -                                  | -                           |
| MAINE.....                    | 50        | -                   | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | 50                          |
| MASSACHUSETTS.....            | 24,391    | -                   | -                | 15,655          | 4,034          | 4,365                          | -                    | -                      | -                               | 337                                | -                           |
| NEW HAMPSHIRE.....            | 2,432     | -                   | -                | 2,421           | -              | -                              | -                    | -                      | -                               | 11                                 | -                           |
| RHODE ISLAND.....             | 5,262     | -                   | -                | 4,723           | 200            | -                              | -                    | -                      | 339                             | -                                  | -                           |
| VERMONT.....                  | -         | -                   | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | -                           |
| MIDDLE ATLANTIC.....          | 133,927   | 2,172               | 4,731            | 7,654           | 108,627        | 4,120                          | -                    | 3,483                  | 126                             | 1,854                              | 1,160                       |
| NEW JERSEY.....               | 64,817    | -                   | 657              | 2,327           | 58,371         | -                              | -                    | 3,240                  | 126                             | 96                                 | -                           |
| NEW YORK.....                 | 60,997    | 2,150               | 4,074            | 4,547           | 43,618         | 4,120                          | -                    | -                      | -                               | 1,328                              | 1,160                       |
| PENNSYLVANIA.....             | 8,113     | 22                  | -                | 760             | 6,638          | -                              | -                    | 243                    | -                               | 430                                | -                           |
| EAST NORTH CENTRAL.....       | 114,564   | 434                 | -                | 54,362          | 47,505         | 2,577                          | 100                  | -                      | 225                             | 8,501                              | 860                         |
| ILLINOIS.....                 | 52,021    | 160                 | -                | 5,766           | 45,089         | 895                            | -                    | -                      | 1                               | 100                                | 10                          |
| INDIANA.....                  | 570       | 12                  | -                | 119             | 139            | -                              | -                    | -                      | -                               | -                                  | 309                         |
| MICHIGAN.....                 | 1,051     | 76                  | -                | 23              | 173            | -                              | 100                  | -                      | 117                             | 22                                 | 540                         |
| OHIO.....                     | 60,390    | 43                  | -                | 48,454          | 2,104          | 1,682                          | -                    | -                      | 107                             | 7,990                              | 10                          |
| WISCONSIN.....                | 532       | 143                 | -                | -               | -              | -                              | -                    | -                      | -                               | 389                                | -                           |
| WEST NORTH CENTRAL.....       | 3,588     | 716                 | -                | 37              | 1,660          | -                              | 490                  | -                      | 112                             | 573                                | -                           |
| IOWA.....                     | 1,440     | 224                 | -                | -               | 1,236          | -                              | -                    | -                      | -                               | -                                  | -                           |
| KANSAS.....                   | 61        | 37                  | -                | -               | 24             | -                              | -                    | -                      | -                               | -                                  | -                           |
| MINNESOTA.....                | 383       | 66                  | -                | 5               | 200            | -                              | -                    | -                      | 112                             | -                                  | -                           |
| MISSOURI.....                 | 872       | 99                  | -                | -               | 200            | -                              | -                    | -                      | -                               | 573                                | -                           |
| NEBRASKA.....                 | 197       | 197                 | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | -                           |
| NORTH DAKOTA.....             | 611       | 89                  | -                | 32              | -              | -                              | 490                  | -                      | -                               | -                                  | -                           |
| SOUTH DAKOTA.....             | 4         | 4                   | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | -                           |
| SOUTH ATLANTIC.....           | 358,498   | 6,618               | 1,630            | 136,515         | 3,336          | 119,384                        | 3,916                | 600                    | 745                             | 71,998                             | 13,756                      |
| DELAWARE.....                 | 11        | 8                   | -                | -               | -              | -                              | -                    | -                      | -                               | 3                                  | -                           |
| DISTRICT OF COLUMBIA.....     | 11,324    | -                   | 25               | 5,240           | 296            | 3,874                          | -                    | -                      | -                               | 349                                | 1,500                       |
| FLORIDA.....                  | 155,226   | 221                 | 971              | 105,099         | -              | -                              | -                    | -                      | 116                             | 48,819                             | -                           |
| GEORGIA.....                  | 1,176     | 83                  | -                | -               | 1,000          | -                              | 1                    | -                      | 78                              | 14                                 | -                           |
| MARYLAND.....                 | 80,390    | 489                 | 34               | 21,751          | 869            | 49,367                         | 3,475                | 200                    | 545                             | 3,060                              | -                           |
| NORTH CAROLINA.....           | 66,762    | 139                 | -                | -               | 27             | 66,143                         | 440                  | -                      | -                               | 13                                 | -                           |
| SOUTH CAROLINA.....           | 2,218     | 1,275               | -                | -               | 937            | -                              | -                    | -                      | 6                               | -                                  | -                           |
| VIRGINIA.....                 | 24,732    | -                   | -                | 4,285           | 207            | -                              | -                    | 400                    | -                               | 19,740                             | -                           |
| WEST VIRGINIA.....            | 16,659    | 4,403               | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | 12,256                      |
| EAST SOUTH CENTRAL.....       | 54,679    | 394                 | -                | 13,549          | 35,488         | -                              | 1                    | -                      | 188                             | 5,059                              | -                           |
| ALABAMA.....                  | 5,337     | 75                  | -                | -               | 1,840          | -                              | -                    | -                      | 19                              | 3,403                              | -                           |
| KENTUCKY.....                 | -         | -                   | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | -                           |
| MISSISSIPPI.....              | 11,535    | 319                 | -                | 9,413           | -              | -                              | -                    | -                      | 169                             | 1,634                              | -                           |
| TENNESSEE.....                | 37,807    | -                   | -                | 4,136           | 33,648         | -                              | 1                    | -                      | -                               | 22                                 | -                           |
| WEST SOUTH CENTRAL.....       | 17,238    | 1,117               | 16               | 4,959           | 2,098          | 793                            | -                    | -                      | 32                              | 8,223                              | -                           |
| ARKANSAS.....                 | 2,793     | -                   | -                | -               | 2,000          | 793                            | -                    | -                      | -                               | -                                  | -                           |
| LOUISIANA.....                | 3,625     | 766                 | -                | -               | -              | -                              | -                    | -                      | -                               | 2,859                              | -                           |
| OKLAHOMA.....                 | 385       | 55                  | -                | 6               | -              | -                              | -                    | -                      | 32                              | 292                                | -                           |
| TEXAS.....                    | 10,435    | 296                 | 16               | 4,953           | 98             | -                              | -                    | -                      | -                               | 5,072                              | -                           |
| MOUNTAIN.....                 | 195,572   | 746                 | 713              | 34,608          | 145,608        | 337                            | 465                  | 6,280                  | 311                             | 1,378                              | 5,126                       |
| ARIZONA.....                  | 1,550     | 61                  | -                | 35              | 520            | -                              | -                    | -                      | -                               | 18                                 | 916                         |
| COLORADO.....                 | 12,699    | 48                  | 713              | 33              | -              | -                              | -                    | 6,280                  | 311                             | 1,214                              | 4,100                       |
| IDAHO.....                    | 26,073    | 17                  | -                | -               | 26,056         | -                              | -                    | -                      | -                               | -                                  | -                           |
| MONTANA.....                  | 818       | 481                 | -                | -               | -              | 337                            | -                    | -                      | -                               | -                                  | -                           |
| NEVADA.....                   | 14,758    | -                   | -                | 2,364           | 12,313         | -                              | -                    | -                      | -                               | 11                                 | 70                          |
| NEW MEXICO.....               | 137,916   | 15                  | -                | 31,012          | 106,270        | -                              | 465                  | -                      | -                               | 114                                | 40                          |
| UTAH.....                     | 1,502     | 84                  | -                | 1,164           | 233            | -                              | -                    | -                      | -                               | 21                                 | -                           |
| WYOMING.....                  | 256       | 40                  | -                | -               | 216            | -                              | -                    | -                      | -                               | -                                  | -                           |
| PACIFIC.....                  | 417,808   | 596                 | -                | 169,513         | 211,980        | -                              | -                    | 10,287                 | 32                              | 19,740                             | 5,660                       |
| ALASKA.....                   | 620       | -                   | -                | 610             | -              | -                              | -                    | -                      | -                               | -                                  | 10                          |
| CALIFORNIA.....               | 303,285   | 457                 | -                | 168,878         | 98,836         | -                              | -                    | 10,287                 | 1                               | 19,176                             | 5,650                       |
| HAWAII.....                   | 484       | -                   | -                | -               | -              | -                              | -                    | -                      | -                               | 484                                | -                           |
| OREGON.....                   | 33        | 6                   | -                | 12              | -              | -                              | -                    | -                      | 15                              | -                                  | -                           |
| WASHINGTON.....               | 113,386   | 133                 | -                | 13              | 113,144        | -                              | -                    | -                      | 16                              | 80                                 | -                           |
| OUTLYING AREAS.....           | 135       | 115                 | -                | -               | -              | -                              | -                    | -                      | -                               | -                                  | 20                          |
| OFFICES ABROAD.....           | 1,919     | -                   | -                | 1,056           | -              | -                              | -                    | -                      | -                               | 416                                | 447                         |

NOTE: THE OBLIGATIONS OF THE TEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&D PLANT OBLIGATIONS IN FY 1977.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-106. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  |           |                 |                  |
|----------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|-----------|-----------------|------------------|
|                                        | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | 1978      |                 |                  | 1979      |                 |                  |
|                                        |              |                 |                  | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL |
| TOTAL, ALL AGENCIES.....               | 6,141,595    | 3,327,873       | 54.2             | 6,564,890 | 3,583,154       | 54.6             | 6,941,157 | 3,706,868       | 53.4             |
| DEPARTMENTS                            |              |                 |                  |           |                 |                  |           |                 |                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 392,878      | 269,545         | 68.6             | 447,216   | 292,792         | 65.5             | 430,886   | 283,828         | 65.9             |
| ECON. STAT & COOPERATIVES SERVICE....  | 29,666       | 19,424          | 66.1             | 33,744    | 22,004          | 65.2             | 35,184    | 22,386          | 63.6             |
| FOREST SERVICE.....                    | 82,359       | 55,714          | 67.6             | 97,390    | 66,225          | 68.0             | 94,052    | 63,955          | 68.0             |
| SCIENCE AND EDUCATION ADMINISTRATION.. | 280,853      | 194,207         | 69.1             | 316,082   | 204,563         | 64.7             | 301,650   | 197,487         | 65.5             |
| COOPERATIVE RESEARCH.....              | 4,021        | 4,021           | 100.0            | 5,384     | 4,784           | 88.9             | 5,733     | 5,733           | 100.0            |
| FEDERAL RESEARCH.....                  | 276,832      | 190,186         | 68.7             | 310,698   | 199,779         | 64.3             | 295,917   | 191,754         | 64.8             |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 170,923      | 94,568          | 55.3             | 185,962   | 99,193          | 53.3             | 214,449   | 110,010         | 51.3             |
| BUREAU OF THE CENSUS.....              | 2,467        | 1,491           | 60.4             | 3,112     | 1,877           | 60.3             | 3,574     | 2,158           | 60.4             |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 536          | 54              | 10.1             | 1,407     | 160             | 10.0             | 1,410     | 161             | 10.0             |
| MARITIME ADMINISTRATION.....           | 1,978        | 165             | 8.3              | 1,550     | 165             | 10.6             | 1,800     | 165             | 9.2              |
| NATIONAL BUREAU OF STANDARDS.....      | 51,768       | 37,555          | 72.5             | 53,898    | 39,125          | 72.6             | 64,988    | 46,782          | 72.0             |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 3,423        | 2,502           | 73.1             | 3,376     | 2,818           | 83.5             | 3,694     | 3,024           | 81.9             |
| NATIONAL OCEANIC & ATMOS ADMIN.....    | 107,010      | 51,345          | 48.0             | 118,353   | 53,445          | 45.2             | 134,065   | 55,867          | 41.7             |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 2,900        | 900             | 31.0             | 2,600     | 1,040           | 40.0             | 3,200     | 1,280           | 40.0             |
| OFFICE OF MINORITY BUSINESS ENTERP...  | 383          | 172             | 44.9             | 1,000     | 172             | 17.2             | 1,050     | 180             | 17.1             |
| PATENT & TRADEMARK OFFICE.....         | 458          | 384             | 83.8             | 466       | 391             | 83.9             | 468       | 393             | 84.0             |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 3,106,458    | 1,621,670       | 52.2             | 3,163,836 | 1,659,768       | 52.5             | 3,426,154 | 1,751,340       | 51.1             |
| DEPARTMENT OF THE ARMY.....            | 918,441      | 540,234         | 58.8             | 987,864   | 548,902         | 55.6             | 1,094,112 | 566,695         | 51.8             |
| DEPARTMENT OF THE NAVY.....            | 1,075,913    | 634,790         | 59.0             | 1,080,678 | 661,911         | 61.2             | 1,148,702 | 694,604         | 60.5             |
| DEPARTMENT OF THE AIR FORCE.....       | 891,804      | 371,556         | 41.7             | 859,791   | 366,917         | 42.7             | 916,280   | 399,194         | 43.6             |
| DEFENSE AGENCIES.....                  | 193,703      | 74,447          | 38.4             | 211,487   | 81,217          | 38.4             | 244,071   | 89,931          | 36.8             |
| DEPARTMENTWIDE FUNDS.....              | 108          | 43              | 39.8             | 552       | 221             | 40.0             | 416       | 166             | 39.9             |
| DIRECTOR OF TEST & EVALUATION, DEF...  | 26,489       | 600             | 2.3              | 23,464    | 600             | 2.6              | 22,573    | 750             | 3.3              |
| DEPARTMENT OF ENERGY.....              | 137,341      | 31,646          | 23.0             | 207,878   | 57,047          | 27.4             | 223,851   | 67,316          | 30.1             |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 554,659      | 263,953         | 47.6             | 605,646   | 297,713         | 49.2             | 630,031   | 314,839         | 50.0             |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 28,533       | 12,946          | 45.4             | 33,547    | 15,155          | 45.2             | 36,325    | 16,210          | 44.6             |
| CENTER FOR DISEASE CONTROL.....        | 38,994       | 33,149          | 85.0             | 40,102    | 34,087          | 85.0             | 41,526    | 35,271          | 84.9             |
| FOOD AND DRUG ADMINISTRATION.....      | 25,295       | 19,425          | 76.8             | 30,057    | 20,882          | 69.5             | 29,370    | 22,239          | 75.7             |
| HEALTH CARE FINANCING ADMINISTRATION.. | 7,960        | 3,867           | 48.6             | 9,389     | 6,109           | 65.1             | 10,409    | 8,766           | 85.0             |
| HEALTH RESOURCES ADMINISTRATION.....   | 296          | 195             | 65.9             | 200       | 132             | 66.0             | -         | -               | -                |
| HEALTH SERVICES ADMINISTRATION.....    | 4,733        | 3,732           | 78.9             | 5,250     | 4,197           | 79.9             | 5,250     | 4,197           | 79.9             |
| HUMAN DEVELOPMENT SERVICES.....        | 4,269        | 2,081           | 48.7             | 4,638     | 3,012           | 64.9             | 4,717     | 2,922           | 61.9             |
| NATIONAL INSTITUTE OF EDUCATION.....   | 12,886       | 8,735           | 67.8             | 13,576    | 9,829           | 72.4             | 14,500    | 9,173           | 63.3             |
| NATIONAL INSTITUTES OF HEALTH.....     | 412,148      | 163,235         | 39.6             | 447,272   | 165,305         | 36.9             | 465,875   | 199,768         | 42.9             |
| OFFICE OF EDUCATION.....               | 1,121        | 889             | 79.3             | 1,403     | 1,065           | 75.9             | 1,630     | 1,174           | 72.0             |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 75           | 50              | 66.7             | 80        | 54              | 67.5             | 80        | 54              | 67.5             |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 9,115        | 6,867           | 75.3             | 8,693     | 6,536           | 76.2             | 8,912     | 7,032           | 78.9             |
| OFFICE OF THE SECRETARY.....           | 1,239        | 1,000           | 80.7             | 1,000     | 1,000           | 100.0            | 2,170     | 1,000           | 46.1             |
| SOCIAL SECURITY ADMINISTRATION.....    | 7,995        | 7,782           | 97.3             | 8,588     | 8,350           | 97.2             | 9,287     | 9,033           | 97.2             |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 20,521       | 11,100          | 54.1             | 23,200    | 12,000          | 51.7             | 24,700    | 11,000          | 44.5             |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 228,442      | 148,567         | 65.0             | 275,826   | 177,775         | 64.5             | 274,213   | 171,755         | 62.6             |
| BUREAU OF LAND MANAGEMENT.....         | 551          | 416             | 75.5             | 553       | 449             | 81.2             | 532       | 400             | 75.2             |
| BUREAU OF MINES.....                   | 65,248       | 52,400          | 80.3             | 79,494    | 63,800          | 80.3             | 65,999    | 53,300          | 80.8             |
| BUREAU OF RECLAMATION.....             | 5,501        | 3,139           | 57.1             | 6,652     | 3,709           | 55.8             | 4,367     | 2,446           | 56.0             |
| GEOLOGICAL SURVEY.....                 | 124,013      | 68,247          | 55.0             | 149,388   | 81,460          | 54.5             | 161,338   | 85,461          | 53.0             |
| HERITAGE CONSERVATION & REC SERVICE..  | 20           | 5               | 25.0             | -         | -               | -                | -         | -               | -                |
| NATIONAL PARK SERVICE.....             | 4,692        | 2,930           | 62.4             | 6,356     | 4,026           | 63.3             | 6,730     | 4,283           | 63.6             |
| OFF OF SURF MINING RECLAM & ENFORCE..  | -            | -               | -                | 1,700     | 300             | 17.6             | 2,000     | 400             | 20.0             |
| OFFICE OF THE SECRETARY.....           | 1,459        | 1,143           | 78.3             | 1,436     | 1,161           | 80.8             | 917       | 740             | 80.7             |
| OFFICE OF WATER RES AND TECHNOLOGY...  | 1,108        | 897             | 81.0             | 2,647     | 2,170           | 82.0             | 2,830     | 2,625           | 92.8             |
| US FISH AND WILDLIFE SERVICE.....      | 25,850       | 19,390          | 75.0             | 27,600    | 20,700          | 75.0             | 29,500    | 22,100          | 74.9             |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 4,174        | 2,730           | 65.4             | 6,081     | 4,264           | 70.1             | 5,187     | 3,046           | 58.7             |
| BUREAU OF PRISONS.....                 | 597          | 503             | 84.3             | 824       | 543             | 65.9             | 784       | 534             | 68.1             |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 900          | 900             | 100.0            | 2,000     | 2,000           | 100.0            | 800       | 800             | 100.0            |
| FEDERAL BUREAU OF INVESTIGATION.....   | 200          | 200             | 100.0            | 275       | 275             | 100.0            | 225       | 225             | 100.0            |
| IMMIGRATION & NATURALIZATION SERVICE   | 43           | 12              | 27.9             | 200       | 150             | 75.0             | 100       | 35              | 35.0             |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 2,434        | 1,115           | 45.8             | 2,682     | 1,214           | 45.3             | 3,178     | 1,372           | 43.2             |
| OFFICE OF THE ATTORNEY GENERAL.....    | -            | -               | -                | 100       | 80              | 80.0             | 100       | 80              | 80.0             |
| DEPARTMENT OF LABOR, TOTAL.....        | 9,507        | 8,020           | 84.4             | 10,608    | 9,288           | 87.6             | 10,236    | 8,959           | 87.5             |
| BUREAU OF LABOR STATISTICS.....        | 1,372        | 1,166           | 85.0             | 1,198     | 1,019           | 85.1             | 860       | 731             | 85.0             |
| EMPLOYMENT AND TRAINING ADMIN.....     | 2,460        | 2,206           | 89.7             | 2,328     | 2,274           | 97.7             | 2,133     | 2,119           | 99.3             |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 4,371        | 3,810           | 87.2             | 5,583     | 4,858           | 87.0             | 5,593     | 4,868           | 87.0             |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 92           | 603             | 60.8             | 1,170     | 866             | 74.0             | 1,170     | 866             | 74.0             |
| OCCUPATIONAL SAFETY & HEALTH ADMIN...  | 141          | 141             | 100.0            | 199       | 199             | 100.0            | 246       | 246             | 100.0            |
| OFFICE OF THE SECRETARY.....           | 171          | 94              | 55.0             | 130       | 72              | 55.4             | 234       | 129             | 55.1             |
| DEPARTMENT OF STATE, TOTAL.....        | 7,552        | 6,873           | 91.0             | 5,357     | 4,282           | 79.9             | 7,504     | 6,989           | 93.1             |
| DEPARTMENTAL FUNDS.....                | 1,077        | 719             | 66.8             | 1,298     | 778             | 59.9             | 1,165     | 660             | 56.7             |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 6,475        | 6,154           | 95.0             | 4,059     | 3,504           | 86.3             | 6,339     | 6,329           | 99.8             |

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TABLE C-106. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                  | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  |           |                 |                  |
|-----------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|-----------|-----------------|------------------|
|                                         | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | 1978      |                 |                  | 1979      |                 |                  |
|                                         |              |                 |                  | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL |
| DEPT OF TRANSPORTATION, TOTAL.....      | 88,284       | 49,468          | 56.0             | 102,399   | 56,041          | 54.7             | 96,077    | 52,156          | 54.3             |
| FEDERAL AVIATION ADMINISTRATION.....    | 24,952       | 13,715          | 55.0             | 29,300    | 16,115          | 55.0             | 25,680    | 14,125          | 55.0             |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 7,404        | 6,240           | 84.3             | 7,400     | 6,240           | 84.3             | 7,645     | 6,440           | 84.2             |
| FEDERAL RAILROAD ADMINISTRATION.....    | 14,968       | 9,290           | 61.9             | 20,597    | 7,090           | 34.4             | 14,390    | 5,180           | 36.0             |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..... | 7,755        | 4,453           | 57.4             | 8,042     | 4,620           | 57.4             | 8,719     | 5,000           | 57.3             |
| OFFICE OF THE SECRETARY.....            | 12,340       | 9,650           | 78.2             | 15,076    | 11,466          | 76.1             | 10,336    | 7,231           | 70.0             |
| RESEARCH & SPECIAL PROGRAM DIRECTORATE  | -            | -               | -                | 200       | 50              | 25.0             | 6,292     | 2,880           | 45.8             |
| US COAST GUARD.....                     | 4,317        | 1,730           | 40.1             | 4,279     | 1,590           | 37.2             | 4,460     | 1,880           | 42.2             |
| URBAN MASS TRANSPORTATION ADMIN.....    | 10,548       | 8,390           | 79.5             | 17,505    | 8,870           | 50.7             | 18,555    | 9,420           | 50.8             |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 3,390        | 2,405           | 70.9             | 3,003     | 1,913           | 63.7             | 3,702     | 2,626           | 70.9             |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 105          | 105             | 100.0            | 116       | 116             | 100.0            | 390       | 390             | 100.0            |
| BUREAU OF ENGRAVING AND PRINTING.....   | 2,500        | 1,800           | 72.0             | 1,662     | 1,197           | 72.0             | 2,162     | 1,556           | 72.0             |
| CUSTOMS SERVICE.....                    | 785          | 500             | 63.7             | 1,225     | 600             | 49.0             | 1,150     | 680             | 59.1             |
| OTHER AGENCIES                          |              |                 |                  |           |                 |                  |           |                 |                  |
| ACTION.....                             | 58           | 54              | 93.1             | 82        | 76              | 92.7             | 83        | 78              | 94.0             |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,526        | 875             | 57.3             | 1,659     | 1,004           | 60.5             | 1,664     | 976             | 58.7             |
| APPALACHIAN REGIONAL COMMISSION.....    | 113          | 74              | 65.5             | 110       | 78              | 70.9             | 110       | 78              | 70.9             |
| CIVIL AERONAUTICS BOARD.....            | 535          | 484             | 90.5             | 734       | 632             | 86.1             | 836       | 738             | 88.3             |
| CIVIL SERVICE COMMISSION.....           | 2,405        | 2,405           | 100.0            | 2,344     | 2,344           | 100.0            | 2,344     | 2,344           | 100.0            |
| COMMUNITY SERVICES ADMINISTRATION.....  | 1,510        | 1,508           | 99.9             | 1,510     | 1,508           | 99.9             | 1,510     | 1,508           | 99.9             |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 3,604        | 1,234           | 34.2             | 2,681     | 1,234           | 46.0             | 3,002     | 1,318           | 43.9             |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 125,616      | 46,486          | 37.0             | 141,394   | 51,270          | 36.3             | 139,694   | 52,179          | 37.4             |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 1,691        | 1,691           | 100.0            | 2,218     | 2,218           | 100.0            | 2,364     | 2,364           | 100.0            |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,482        | 465             | 31.4             | 1,033     | 545             | 52.8             | 1,176     | 554             | 47.1             |
| FEDERAL TRADE COMMISSION.....           | 1,111        | 975             | 87.6             | 1,335     | 1,205           | 90.3             | 1,319     | 1,204           | 91.3             |
| GENERAL SERVICES ADMINISTRATION.....    | 61           | 46              | 75.4             | 1,373     | 1,031           | 75.1             | 92        | 69              | 75.0             |
| INTERNATIONAL COMMUNICATION AGENCY..... | 98           | 53              | 54.1             | 142       | 81              | 57.0             | 125       | 75              | 60.0             |
| INTERSTATE COMMERCE COMMISSION.....     | 64           | 45              | 70.3             | 184       | 130             | 70.7             | 35        | 25              | 71.4             |
| LIBRARY OF CONGRESS.....                | 3,460        | 2,729           | 78.9             | 4,024     | 3,314           | 82.4             | 4,200     | 3,321           | 79.1             |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 1,037,794    | 641,140         | 61.8             | 1,104,415 | 688,461         | 62.3             | 1,153,337 | 690,947         | 59.9             |
| NATIONAL SCIENCE FOUNDATION.....        | 79,506       | 10,742          | 13.5             | 89,058    | 34,579          | 38.8             | 96,559    | 35,082          | 36.3             |
| NUCLEAR REGULATORY COMMISSION.....      | 9,358        | 4,102           | 43.8             | 10,116    | 5,025           | 49.7             | 12,147    | 5,700           | 46.9             |
| SMALL BUSINESS ADMINISTRATION.....      | 332          | 288             | 86.7             | -         | -               | -                | 5         | 5               | 100.0            |
| SMITHSONIAN INSTITUTION.....            | 27,293       | 18,947          | 69.4             | 30,110    | 21,757          | 72.3             | 30,960    | 22,421          | 72.4             |
| TENNESSEE VALLEY AUTHORITY.....         | 13,018       | 10,521          | 80.8             | 17,434    | 14,108          | 80.9             | 27,323    | 21,858          | 80.0             |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 90           | 78              | 86.7             | 200       | 100             | 50.0             | 290       | 205             | 70.7             |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,649        | 2,120           | 80.0             | 2,622     | 2,098           | 80.0             | 2,666     | 2,133           | 80.0             |
| VETERANS ADMINISTRATION.....            | 104,092      | 70,266          | 67.5             | 113,100   | 78,280          | 69.2             | 112,326   | 77,822          | 69.3             |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-107. FEDERAL OBLIGATIONS FOR TOTAL BASIC RESEARCH TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS,  
BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  | ESTIMATES |                 |                  |
|----------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|-----------|-----------------|------------------|
|                                        | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL |
| TOTAL, ALL AGENCIES.....               | 888,192      | 445,840         | 51.43            | 975,295   | 522,470         | 53.68            | 1,046,243 | 542,485         | 51.93            |
| DEPARTMENTS                            |              |                 |                  |           |                 |                  |           |                 |                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 144,208      | 99,036          | 68.7             | 168,471   | 109,432         | 65.0             | 166,149   | 109,222         | 65.7             |
| ECON. STAT & COOPERATIVES SERVICE....  | 3,680        | 2,489           | 67.6             | 4,191     | 2,650           | 63.2             | 4,329     | 2,650           | 61.2             |
| FOREST SERVICE.....                    | 20,677       | 13,730          | 66.4             | 23,975    | 16,303          | 68.0             | 23,425    | 15,929          | 68.0             |
| SCIENCE AND EDUCATION ADMINISTRATION.. | 119,849      | 82,817          | 69.1             | 140,305   | 90,479          | 64.5             | 138,395   | 90,643          | 65.5             |
| COOPERATIVE RESEARCH.....              | 1,528        | 1,528           | 100.0            | 2,418     | 1,810           | 75.2             | 2,737     | 2,737           | 100.0            |
| FEDERAL RESEARCH.....                  | 118,321      | 81,289          | 68.7             | 137,887   | 88,661          | 64.3             | 135,658   | 87,906          | 64.8             |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 18,385       | 10,983          | 59.7             | 20,132    | 11,809          | 58.7             | 22,801    | 12,011          | 52.7             |
| BUREAU OF THE CENSUS.....              | 33           | 20              | 60.6             | 84        | 51              | 60.7             | 161       | 98              | 60.9             |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 40           | 4               | 10.0             | 50        | 5               | 10.0             | 50        | 5               | 10.0             |
| MARITIME ADMINISTRATION.....           | 56           | 15              | 26.8             | 50        | 15              | 30.0             | 50        | 15              | 30.0             |
| NATIONAL BUREAU OF STANDARDS.....      | 6,094        | 4,722           | 77.5             | 6,448     | 5,004           | 77.6             | 7,517     | 5,461           | 72.6             |
| NATIONAL FIRE PREV & CONTROL ADMIN.... | 1,220        | 1,090           | 89.3             | 1,214     | 1,199           | 91.2             | 1,107     | 1,004           | 90.7             |
| NATIONAL OCEANIC & ATMOS ADMIN.....    | 10,642       | 4,997           | 47.0             | 11,886    | 5,400           | 45.4             | 13,616    | 5,293           | 38.9             |
| NAT'L TELECOMM & INFO ADMIN.....       | 100          | 40              | 40.0             | 100       | 40              | 40.0             | 100       | 40              | 40.0             |
| OFFICE OF MINORITY BUSINESS ENTERP.... | 200          | 95              | 47.5             | 200       | 95              | 47.5             | 200       | 95              | 47.5             |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 107,447      | 68,545          | 61.9             | 108,420   | 67,701          | 62.4             | 112,106   | 66,901          | 59.7             |
| DEPARTMENT OF THE ARMY.....            | 31,362       | 21,575          | 68.8             | 31,220    | 21,045          | 67.4             | 29,925    | 17,617          | 58.9             |
| DEPARTMENT OF THE NAVY.....            | 44,725       | 25,391          | 56.8             | 46,161    | 26,476          | 57.4             | 48,693    | 27,784          | 57.1             |
| DEPARTMENT OF THE AIR FORCE.....       | 25,165       | 19,079          | 75.8             | 25,758    | 19,580          | 76.0             | 27,028    | 20,600          | 76.2             |
| DEFENSE AGENCIES.....                  | 8,195        | 500             | 8.1              | 5,281     | 600             | 11.4             | 6,460     | 900             | 13.9             |
| DEPARTMENT OF ENERGY.....              | 659          | 198             | 30.0             | 687       | 206             | 30.0             | 1,007     | 302             | 30.0             |
| DEPT OF HEALTH, EDUC. & WELFARE, TOTAL | 167,551      | 62,019          | 37.0             | 191,456   | 71,818          | 37.5             | 218,507   | 82,126          | 37.6             |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 19,318       | 8,614           | 44.6             | 23,031    | 10,227          | 44.4             | 25,163    | 10,887          | 43.3             |
| HEALTH SERVICES ADMINISTRATION.....    | 2,031        | 1,595           | 78.5             | 2,300     | 1,840           | 80.0             | 2,300     | 1,840           | 80.0             |
| HUMAN DEVELOPMENT SERVICES.....        | 110          | 63              | 57.3             | 123       | 90              | 73.2             | 123       | 90              | 73.2             |
| NATIONAL INSTITUTE OF EDUCATION.....   | 2,358        | 1,598           | 67.8             | 3,061     | 2,064           | 67.4             | 3,654     | 2,312           | 63.3             |
| NATIONAL INSTITUTES OF HEALTH.....     | 141,805      | 48,687          | 34.3             | 160,670   | 56,147          | 34.9             | 184,681   | 65,724          | 35.6             |
| OFFICE OF ASST SECY FOR HEALTH.....    | 737          | 502             | 68.1             | 666       | 650             | 97.6             | 621       | 423             | 68.1             |
| OFFICE OF THE SECRETARY.....           | 1,192        | 960             | 80.5             | 1,605     | 809             | 49.8             | 1,965     | 850             | 43.3             |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 118,553      | 69,155          | 58.3             | 142,570   | 82,446          | 57.8             | 150,609   | 85,461          | 56.7             |
| BUREAU OF MINES.....                   | 4,000        | 3,500           | 87.5             | 5,300     | 4,500           | 84.9             | 6,600     | 5,800           | 87.9             |
| BUREAU OF RECLAMATION.....             | 80           | 55              | 68.8             | 130       | 91              | 70.0             | 176       | 122             | 69.3             |
| GEOLOGICAL SURVEY.....                 | 101,508      | 55,862          | 55.0             | 122,842   | 66,984          | 54.5             | 129,241   | 68,459          | 53.0             |
| OFFICE OF THE SECRETARY.....           | 1,053        | 823             | 78.2             | 1,426     | 1,151           | 80.7             | 917       | 740             | 80.7             |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 162          | 100             | 61.7             | 472       | 420             | 89.0             | 475       | 440             | 92.6             |
| US FISH AND WILDLIFE SERVICE.....      | 11,750       | 8,815           | 75.0             | 12,400    | 9,300           | 75.0             | 13,200    | 9,900           | 75.0             |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 536          | 124             | 23.1             | 712       | 316             | 44.4             | 915       | 381             | 41.6             |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 536          | 124             | 23.1             | 712       | 316             | 44.4             | 915       | 381             | 41.6             |
| DEPARTMENT OF LABOR, TOTAL.....        | 199          | 137             | 68.8             | 177       | 145             | 81.9             | 162       | 125             | 77.2             |
| EMPLOYMENT AND TRAINING ADMIN.....     | 54           | 50              | 92.6             | 62        | 60              | 96.8             | 47        | 40              | 85.1             |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 145          | 87              | 60.0             | 115       | 85              | 73.9             | 115       | 85              | 73.9             |
| OTHER AGENCIES                         |              |                 |                  |           |                 |                  |           |                 |                  |
| ACTION.....                            | 15           | 14              | 93.3             | 27        | 25              | 92.6             | -         | -               | -                |
| CIVIL SERVICE COMMISSION.....          | 394          | 394             | 100.0            | 409       | 409             | 100.0            | 409       | 409             | 100.0            |
| ENVIRONMENTAL PROTECTION AGENCY.....   | 415          | 415             | 100.0            | 416       | 416             | 100.0            | 5,833     | 1,584           | 27.2             |
| FEDERAL TRADE COMMISSION.....          | 361          | 305             | 84.5             | 454       | 424             | 93.4             | 444       | 407             | 91.7             |
| GENERAL SERVICES ADMINISTRATION.....   | 91           | 71              | 77.8             | 1,314     | 986             | 75.0             | 171       | 131             | 76.5             |
| LIBRARY OF CONGRESS.....               | 140          | 24              | 17.1             | 130       | 59              | 45.4             | 130       | 59              | 45.4             |
| NATIONAL AERONAUTICS & SPACE ADMIN.... | 192,243      | 99,418          | 51.7             | 211,924   | 111,517         | 52.6             | 230,934   | 117,142         | 50.7             |
| NATIONAL SCIENCE FOUNDATION.....       | 75,392       | 9,110           | 12.1             | 84,890    | 33,609          | 39.6             | 91,526    | 33,957          | 37.1             |
| SMITHSONIAN INSTITUTION.....           | 27,293       | 18,947          | 69.4             | 30,110    | 21,757          | 72.3             | 30,960    | 22,421          | 72.4             |
| TENNESSEE VALLEY AUTHORITY.....        | 3,546        | 2,836           | 80.0             | 3,712     | 2,969           | 80.0             | 4,178     | 3,342           | 80.0             |
| VETERANS ADMINISTRATION.....           | 8,848        | 5,973           | 67.5             | 9,284     | 6,426           | 69.2             | 9,558     | 6,622           | 69.3             |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-108. FEDERAL OBLIGATIONS FOR TOTAL APPLIED RESEARCH TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS,  
BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  |           |                 |                  |
|----------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|-----------|-----------------|------------------|
|                                        | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL |
| TOTAL, ALL AGENCIES.....               | 2,170,839    | 1,255,617       | 57.8%            | 2,284,550 | 1,334,931       | 58.4%            | 2,367,189 | 1,362,746       | 57.6%            |
| DEPARTMENTS                            |              |                 |                  |           |                 |                  |           |                 |                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 228,092      | 156,341         | 68.5             | 256,455   | 168,735         | 65.8             | 244,536   | 161,258         | 65.9             |
| ECON, STAT & COOPERATIVES SERVICE....  | 25,223       | 16,600          | 65.8             | 28,751    | 18,731          | 65.1             | 30,053    | 19,113          | 63.6             |
| FOREST SERVICE.....                    | 57,530       | 39,113          | 68.0             | 68,410    | 46,519          | 68.0             | 65,793    | 44,739          | 68.0             |
| SCIENCE AND EDUCATION ADMINISTRATION   | 145,339      | 100,628         | 69.2             | 159,294   | 103,485         | 65.0             | 148,690   | 97,406          | 65.5             |
| COOPERATIVE RESEARCH.....              | 2,493        | 2,493           | 100.0            | 2,966     | 2,966           | 100.0            | 2,996     | 2,996           | 100.0            |
| FEDERAL RESEARCH.....                  | 142,846      | 98,135          | 68.7             | 156,328   | 100,519         | 64.3             | 145,694   | 94,410          | 64.8             |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 121,491      | 64,763          | 53.3             | 131,479   | 68,849          | 52.4             | 153,856   | 77,291          | 50.2             |
| BUREAU OF THE CENSUS.....              | 1,808        | 1,097           | 60.7             | 1,904     | 1,155           | 60.7             | 2,283     | 1,385           | 60.7             |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 240          | 24              | 10.0             | 925       | 92              | 9.9              | 561       | 56              | 10.0             |
| MARITIME ADMINISTRATION.....           | 933          | 75              | 8.0              | 700       | 75              | 10.7             | 750       | 75              | 10.0             |
| NATIONAL BUREAU OF STANDARDS.....      | 37,526       | 27,040          | 72.1             | 39,390    | 28,390          | 72.1             | 47,622    | 34,322          | 72.1             |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 1,135        | 1,030           | 90.7             | 1,237     | 1,127           | 91.1             | 1,552     | 1,408           | 90.7             |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 77,885       | 34,982          | 44.9             | 85,598    | 37,315          | 43.6             | 98,689    | 39,148          | 39.7             |
| NAT'L TELECOMM & INFO ADMIN.....       | 1,900        | 500             | 26.3             | 1,700     | 680             | 40.0             | 2,200     | 880             | 40.0             |
| OFFICE OF MINORITY BUSINESS ENTERP..   | 64           | 15              | 23.4             | 251       | 15              | 60.0             | 200       | 17              | 8.5              |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 700,478      | 424,257         | 60.6             | 653,822   | 407,582         | 62.3             | 682,297   | 407,075         | 59.7             |
| DEPARTMENT OF THE ARMY.....            | 272,764      | 184,414         | 67.6             | 273,744   | 190,445         | 69.6             | 281,708   | 184,123         | 65.4             |
| DEPARTMENT OF THE NAVY.....            | 151,049      | 107,931         | 71.5             | 151,708   | 112,524         | 74.2             | 161,520   | 118,083         | 73.1             |
| DEPARTMENT OF THE AIR FORCE.....       | 190,124      | 108,561         | 57.1             | 142,297   | 84,098          | 59.1             | 137,141   | 83,793          | 61.1             |
| DEFENSE AGENCIES.....                  | 86,433       | 23,308          | 27.0             | 85,521    | 20,294          | 23.7             | 101,512   | 20,910          | 20.6             |
| DEPARTMENTWIDE FUNDS.....              | 108          | 43              | 39.8             | 552       | 221             | 40.0             | 416       | 166             | 39.9             |
| DEPARTMENT OF ENERGY.....              | 25,982       | 7,608           | 29.3             | 32,007    | 10,247          | 32.0             | 33,575    | 10,713          | 31.9             |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 356,186      | 176,017         | 49.4             | 382,007   | 198,230         | 51.9             | 380,949   | 207,443         | 54.5             |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 9,190        | 4,307           | 46.9             | 10,491    | 4,903           | 46.7             | 11,137    | 5,298           | 47.6             |
| CENTER FOR DISEASE CONTROL.....        | 38,994       | 33,149          | 85.0             | 40,102    | 34,087          | 85.0             | 41,526    | 35,271          | 84.9             |
| FOOD AND DRUG ADMINISTRATION.....      | 25,295       | 19,425          | 76.8             | 30,057    | 20,882          | 69.5             | 29,370    | 22,239          | 75.7             |
| HEALTH CARE FINANCING ADMINISTRATION.. | 7,960        | 3,867           | 48.6             | 9,389     | 6,109           | 65.1             | 10,409    | 6,766           | 65.0             |
| HEALTH RESOURCES ADMINISTRATION.....   | 296          | 195             | 65.9             | 200       | 132             | 66.0             | -         | -               | -                |
| HEALTH SERVICES ADMINISTRATION.....    | 1,752        | 1,362           | 77.7             | 2,000     | 1,582           | 79.1             | 2,000     | 1,582           | 79.1             |
| HUMAN DEVELOPMENT SERVICES.....        | 2,456        | 1,214           | 49.4             | 2,710     | 1,724           | 63.6             | 2,747     | 1,724           | 62.8             |
| NATIONAL INSTITUTE OF EDUCATION.....   | 3,028        | 2,052           | 67.8             | 3,309     | 2,231           | 67.4             | 3,552     | 2,247           | 63.3             |
| NATIONAL INSTITUTES OF HEALTH.....     | 251,593      | 97,103          | 38.6             | 267,637   | 111,084         | 41.5             | 263,384   | 117,499         | 44.6             |
| OFFICE OF EDUCATION.....               | 563          | 406             | 72.1             | 651       | 470             | 72.2             | 742       | 534             | 72.0             |
| OFFICE OF ASS'T SECTY FOR EDUCATION..  | 75           | 50              | 66.7             | 80        | 54              | 67.5             | 80        | 54              | 67.5             |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 6,942        | 5,065           | 73.0             | 6,547     | 6,422           | 98.1             | 6,530     | 5,046           | 77.3             |
| OFFICE OF THE SECRETARY.....           | 47           | 40              | 85.1             | 246       | 200             | 81.3             | 205       | 150             | 73.2             |
| SOCIAL SECURITY ADMINISTRATION.....    | 7,995        | 7,782           | 97.3             | 8,588     | 8,350           | 97.2             | 9,267     | 9,033           | 97.5             |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 14,365       | 8,600           | 59.9             | 13,400    | 8,100           | 60.4             | 13,400    | 7,000           | 52.2             |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 82,614       | 58,080          | 70.3             | 97,459    | 67,383          | 69.1             | 98,868    | 66,956          | 67.7             |
| BUREAU OF LAND MANAGEMENT.....         | 489          | 359             | 73.4             | 462       | 368             | 79.7             | 430       | 300             | 69.8             |
| BUREAU OF MINES.....                   | 40,322       | 32,200          | 79.9             | 45,765    | 36,600          | 80.0             | 42,665    | 34,100          | 79.9             |
| BUREAU OF RECLAMATION.....             | 4,819        | 2,731           | 56.7             | 5,906     | 3,248           | 55.0             | 3,341     | 1,814           | 54.3             |
| GEOLOGICAL SURVEY.....                 | 22,505       | 12,385          | 55.0             | 26,546    | 14,476          | 54.5             | 32,097    | 17,002          | 53.0             |
| HERITAGE CONSERVATION & REC SERVICE..  | 20           | 5               | 25.0             | -         | -               | -                | -         | -               | -                |
| NATIONAL PARK SERVICE.....             | 4,582        | 2,858           | 62.4             | 6,210     | 3,931           | 63.3             | 6,550     | 4,165           | 63.6             |
| OFF OF SURF MINING RECLAM & ENFORCE..  | -            | -               | -                | 1,700     | 300             | 17.6             | 2,000     | 400             | 20.0             |
| OFFICE OF THE SECRETARY.....           | 406          | 320             | 78.8             | 101       | 101             | 100.0            | -         | -               | -                |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 771          | 697             | 90.4             | 1,560     | 1,450           | 92.9             | 1,785     | 1,675           | 93.8             |
| US FISH AND WILDLIFE SERVICE.....      | 8,700        | 6,525           | 75.0             | 9,300     | 7,000           | 75.3             | 10,000    | 7,500           | 75.0             |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 1,720        | 1,249           | 72.6             | 2,717     | 2,005           | 73.8             | 2,390     | 1,447           | 60.5             |
| BUREAU OF PRISONS.....                 | 42           | 32              | 76.2             | 100       | 70              | 70.0             | 174       | 74              | 42.5             |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 400          | 400             | 100.0            | 1,000     | 1,000           | 100.0            | 400       | 400             | 100.0            |
| IMMIGRATION & NATURALIZATION SERVICE   | 6            | 2               | 33.4             | 100       | 75              | 75.0             | 25        | 10              | 40.0             |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 1,272        | 815             | 64.1             | 1,417     | 780             | 55.0             | 1,691     | 883             | 52.2             |
| OFFICE OF THE ATTORNEY GENERAL.....    | -            | -               | -                | 100       | 80              | 80.0             | 100       | 80              | 80.0             |
| DEPARTMENT OF LABOR, TOTAL.....        | 8,602        | 7,279           | 84.6             | 9,734     | 8,555           | 87.9             | 9,988     | 8,754           | 87.6             |
| BUREAU OF LABOR STATISTICS.....        | 896          | 762             | 85.0             | 742       | 631             | 85.0             | 860       | 731             | 85.0             |
| EMPLOYMENT AND TRAINING ADMIN.....     | 2,176        | 1,956           | 89.9             | 2,025     | 2,014           | 99.5             | 2,000     | 1,999           | 100.0            |
| EMPLOYMENT STANDARDS ADMINISTRATION..  | 4,371        | 3,810           | 87.2             | 5,583     | 4,858           | 87.0             | 5,593     | 4,868           | 87.0             |
| LABOR-MANAGEMENT SERVICES ADMIN.....   | 847          | 516             | 60.9             | 1,055     | 781             | 74.0             | 1,055     | 781             | 74.0             |
| OCCUPATIONAL SAFETY & HEALTH ADMIN..   | 141          | 141             | 100.0            | 199       | 199             | 100.0            | 246       | 246             | 100.0            |
| OFFICE OF THE SECRETARY.....           | 171          | 94              | 55.0             | 130       | 72              | 55.4             | 234       | 129             | 55.1             |
| DEPARTMENT OF STATE, TOTAL.....        | 7,079        | 6,731           | 95.1             | 4,447     | 3,961           | 89.1             | 6,739     | 6,244           | 92.7             |
| DEPARTMENTAL FUNDS.....                | 1,062        | 714             | 67.2             | 1,238     | 752             | 60.7             | 1,150     | 655             | 57.0             |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 6,017        | 6,017           | 100.0            | 3,209     | 3,209           | 100.0            | 5,589     | 5,589           | 100.0            |

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TABLE C-100. FEDERAL OBLIGATIONS FOR TOTAL APPLIED RESEARCH TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS,  
BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

- CONTINUED

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                  | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  |         |                 |                  |
|-----------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|---------|-----------------|------------------|
|                                         |              |                 |                  | 1978      |                 |                  | 1979    |                 |                  |
|                                         | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL   | PERSONNEL COSTS | PERCENT OF TOTAL |
| DEPT OF TRANSPORTATION, TOTAL.....      | 16,319       | 10,013          | 61.4             | 18,568    | 11,275          | 60.7             | 18,894  | 11,275          | 59.7             |
| FEDERAL AVIATION ADMINISTRATION.....    | 1,050        | 575             | 54.6             | 1,720     | 945             | 54.9             | 1,645   | 905             | 55.0             |
| FEDERAL HIGHWAY ADMINISTRATION.....     | 1,024        | 820             | 80.1             | 1,015     | 810             | 79.8             | 1,115   | 890             | 79.8             |
| FEDERAL RAILROAD ADMINISTRATION.....    | 5,140        | 2,830           | 55.1             | 6,464     | 3,560           | 55.1             | 5,295   | 2,910           | 55.0             |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..    | 6,195        | 3,593           | 58.0             | 6,500     | 3,770           | 58.0             | 7,019   | 4,070           | 58.0             |
| OFFICE OF THE SECRETARY.....            | 1,573        | 1,295           | 82.3             | 1,940     | 1,560           | 80.4             | 1,120   | 850             | 75.9             |
| RESEARCH & SPECIAL PROGRAM DIRECTATE    | -            | -               | -                | -         | -               | -                | 940     | 470             | 50.0             |
| US COAST GUARD.....                     | 737          | 480             | 65.1             | 329       | 210             | 63.8             | 1,060   | 690             | 65.1             |
| URBAN MASS TRANSPORTATION ADMIN.....    | 600          | 420             | 70.0             | 600       | 420             | 70.0             | 700     | 490             | 70.0             |
| DEPARTMENT OF THE TREASURY, TOTAL.....  | 1,790        | 1,314           | 73.4             | 1,200     | 890             | 74.2             | 1,509   | 1,111           | 73.6             |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS    | 90           | 90              | 100.0            | 92        | 92              | 100.0            | 90      | 90              | 100.0            |
| BUREAU OF ENGRAVING AND PRINTING.....   | 1,700        | 1,224           | 72.0             | 1,108     | 798             | 72.0             | 1,419   | 1,021           | 72.0             |
| OTHER AGENCIES                          |              |                 |                  |           |                 |                  |         |                 |                  |
| ACTION.....                             | 14           | 13              | 92.9             | 14        | 13              | 92.9             | 41      | 39              | 95.1             |
| ADVISORY COMM ON INTERGOV'TL RELATIONS  | 1,526        | 875             | 57.3             | 1,659     | 1,004           | 60.5             | 1,664   | 976             | 58.7             |
| APPALACHIAN REGIONAL COMMISSION.....    | 108          | 70              | 64.8             | 100       | 70              | 70.0             | 100     | 70              | 70.0             |
| CIVIL AERONAUTICS BOARD.....            | 535          | 484             | 90.5             | 734       | 632             | 86.1             | 836     | 738             | 88.3             |
| CIVIL SERVICE COMMISSION.....           | 691          | 691             | 100.0            | 718       | 718             | 100.0            | 718     | 718             | 100.0            |
| COMMUNITY SERVICES ADMINISTRATION.....  | 10           | 8               | 80.0             | 10        | 8               | 80.0             | 10      | 8               | 80.0             |
| CONSUMER PRODUCT SAFETY COMMISSION..... | 2,092        | 868             | 41.5             | 1,395     | 754             | 54.1             | 1,590   | 838             | 52.7             |
| ENVIRONMENTAL PROTECTION AGENCY.....    | 83,590       | 31,610          | 37.8             | 105,125   | 37,947          | 36.1             | 96,261  | 37,241          | 38.7             |
| FEDERAL COMMUNICATIONS COMMISSION.....  | 1,691        | 1,691           | 100.0            | 2,218     | 2,218           | 100.0            | 2,364   | 2,364           | 100.0            |
| FEDERAL HOME LOAN BANK BOARD.....       | 1,482        | 465             | 31.4             | 1,033     | 545             | 52.8             | 1,176   | 554             | 47.1             |
| FEDERAL TRADE COMMISSION.....           | 750          | 670             | 89.3             | 881       | 781             | 88.6             | 875     | 797             | 91.1             |
| GENERAL SERVICES ADMINISTRATION.....    | 39           | 29              | 74.4             | 41        | 31              | 75.6             | 52      | 39              | 75.0             |
| INTERNATIONAL COMMUNICATION AGENCY..... | 65           | 44              | 67.7             | 104       | 71              | 68.3             | 100     | 68              | 68.0             |
| INTERSTATE COMMERCE COMMISSION.....     | 64           | 45              | 70.3             | 184       | 130             | 70.7             | 35      | 25              | 71.4             |
| LIBRARY OF CONGRESS.....                | 260          | 166             | 63.8             | 270       | 240             | 88.9             | 270     | 240             | 88.9             |
| NATIONAL AERONAUTICS & SPACE ADMIN..... | 409,857      | 227,986         | 55.6             | 451,212   | 256,481         | 56.8             | 487,587 | 266,669         | 54.7             |
| NATIONAL SCIENCE FOUNDATION.....        | 4,111        | 1,629           | 39.6             | 4,166     | 968             | 23.2             | 5,030   | 1,122           | 22.3             |
| NUCLEAR REGULATORY COMMISSION.....      | 9,358        | 4,102           | 43.8             | 10,116    | 5,025           | 49.7             | 12,147  | 5,700           | 46.9             |
| SMALL BUSINESS ADMINISTRATION.....      | 332          | 288             | 86.7             | -         | -               | -                | 5       | 5               | 100.0            |
| TENNESSEE VALLEY AUTHORITY.....         | 5,883        | 4,814           | 81.8             | 8,958     | 7,328           | 81.8             | 17,867  | 14,294          | 80.0             |
| US ARMS CONTROL & DISARMAMENT AGENCY..  | 30           | 30              | 100.0            | 120       | 60              | 50.0             | 170     | 140             | 82.4             |
| US INTERNATIONAL TRADE COMMISSION.....  | 2,649        | 2,120           | 80.0             | 2,622     | 2,098           | 80.0             | 2,666   | 2,133           | 80.0             |
| VETERANS ADMINISTRATION.....            | 80,984       | 54,667          | 67.5             | 89,575    | 61,997          | 69.2             | 88,624  | 61,401          | 69.3             |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-109. FEDERAL OBLIGATIONS FOR TOTAL DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS,  
BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

| AGENCY AND SUBDIVISION                 | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  |           |                 |                  |
|----------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|-----------|-----------------|------------------|
|                                        | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL |
| TOTAL, ALL AGENCIES.....               | 3,104,564    | 1,626,616       | 52.4%            | 3,305,045 | 1,725,753       | 52.2%            | 3,527,723 | 1,801,637       | 51.1%            |
| DEPARTMENTS                            |              |                 |                  |           |                 |                  |           |                 |                  |
| DEPARTMENT OF AGRICULTURE, TOTAL.....  | 20,500       | 14,168          | 68.8             | 22,290    | 14,625          | 65.6             | 20,201    | 13,348          | 66.1             |
| ECON, STAT & COOPERATIVES SERVICE....  | 763          | 535             | 70.1             | 802       | 623             | 77.7             | 802       | 623             | 77.7             |
| FOREST SERVICE.....                    | 4,152        | 2,871           | 69.1             | 5,005     | 3,403           | 68.0             | 4,834     | 3,287           | 68.0             |
| SCIENCE AND EDUCATION ADMINISTRATION   | 15,665       | 10,762          | 68.7             | 16,483    | 10,599          | 64.3             | 14,565    | 9,438           | 64.8             |
| FEDERAL RESEARCH.....                  | 15,665       | 10,762          | 68.7             | 16,483    | 10,599          | 64.3             | 14,565    | 9,438           | 64.8             |
| DEPARTMENT OF COMMERCE, TOTAL.....     | 31,047       | 18,822          | 60.6             | 34,351    | 18,535          | 54.0             | 37,702    | 20,708          | 54.8             |
| BUREAU OF THE CENSUS.....              | 626          | 374             | 59.7             | 1,124     | 671             | 59.7             | 1,130     | 675             | 59.7             |
| ECONOMIC DEVELOPMENT ADMINISTRATION..  | 256          | 26              | 10.2             | 632       | 63              | 10.0             | 1,000     | 100             | 10.0             |
| MARITIME ADMINISTRATION.....           | 989          | 75              | 7.6              | 800       | 75              | 9.4              | 1,000     | 75              | 7.5              |
| NATIONAL BUREAU OF STANDARDS.....      | 8,148        | 5,793           | 71.1             | 8,060     | 5,731           | 71.1             | 9,849     | 6,999           | 71.1             |
| NATIONAL FIRE PREV & CONTROL ADMIN..   | 1,068        | 382             | 35.8             | 825       | 492             | 59.6             | 1,035     | 612             | 59.1             |
| NATIONAL OCEANIC AND ATMOS ADMIN.....  | 18,483       | 11,366          | 61.5             | 20,869    | 10,730          | 51.4             | 21,760    | 11,426          | 52.5             |
| NAT'L TELECOMMUN & INFO ADMIN.....     | 900          | 360             | 40.0             | 800       | 320             | 40.0             | 900       | 360             | 40.0             |
| OFFICE OF MINORITY BUSINESS ENTERP..   | 119          | 62              | 52.1             | 775       | 62              | 8.0              | 650       | 68              | 10.5             |
| PATENT & TRADEMARK OFFICE.....         | 458          | 384             | 83.8             | 468       | 391             | 83.9             | 468       | 393             | 84.0             |
| DEPARTMENT OF DEFENSE, TOTAL.....      | 2,298,533    | 1,130,868       | 49.2             | 2,401,594 | 1,184,485       | 49.3             | 2,631,751 | 1,277,364       | 48.5             |
| DEPARTMENT OF THE ARMY.....            | 614,315      | 334,245         | 54.4             | 682,900   | 337,412         | 49.4             | 782,479   | 364,955         | 46.6             |
| DEPARTMENT OF THE NAVY.....            | 880,139      | 501,468         | 57.0             | 882,809   | 522,911         | 59.2             | 938,489   | 548,737         | 58.5             |
| DEPARTMENT OF THE AIR FORCE.....       | 674,515      | 243,916         | 36.1             | 691,736   | 263,239         | 38.1             | 752,111   | 294,801         | 39.2             |
| DEFENSE AGENCIES.....                  | 101,075      | 50,639          | 50.1             | 120,885   | 60,323          | 50.0             | 136,099   | 68,121          | 50.1             |
| DIRECTOR OF TEST & EVALUATION, DEF..   | 66,489       | 600             | 2.3              | 23,464    | 600             | 2.6              | 22,573    | 750             | 3.3              |
| DEPARTMENT OF ENERGY.....              | 110,700      | 23,840          | 21.5             | 175,184   | 45,594          | 26.6             | 189,269   | 56,301          | 29.7             |
| DEPT OF HEALTH, EDUC, & WELFARE, TOTAL | 30,922       | 25,917          | 83.8             | 32,183    | 27,665          | 86.0             | 30,575    | 25,270          | 82.6             |
| ALCOHOL, DRUG ABUSE & MENTAL HEALTH..  | 25           | 25              | 100.0            | 25        | 25              | 100.0            | 25        | 25              | 100.0            |
| HEALTH SERVICES ADMINISTRATION.....    | 950          | 775             | 81.6             | 950       | 775             | 81.6             | 950       | 775             | 81.6             |
| HUMAN DEVELOPMENT SERVICES.....        | 1,703        | 804             | 47.2             | 1,805     | 1,198           | 66.4             | 1,847     | 1,108           | 60.0             |
| NATIONAL INSTITUTE OF EDUCATION.....   | 7,500        | 5,085           | 67.8             | 8,206     | 5,534           | 67.4             | 7,294     | 4,614           | 63.3             |
| NATIONAL INSTITUTES OF HEALTH.....     | 18,750       | 17,445          | 93.0             | 18,965    | 18,074          | 95.3             | 17,810    | 16,545          | 92.9             |
| OFFICE OF EDUCATION.....               | 558          | 483             | 86.6             | 752       | 595             | 79.1             | 888       | 640             | 72.1             |
| OFFICE OF ASS'T SECTY FOR HEALTH.....  | 1,436        | 1,300           | 90.5             | 1,480     | 1,464           | 98.9             | 1,761     | 1,563           | 88.8             |
| DEPT OF HOUSING & URBAN DEVELOPMENT... | 6,156        | 2,500           | 40.6             | 9,800     | 3,900           | 39.8             | 11,300    | 4,000           | 35.4             |
| DEPARTMENT OF THE INTERIOR, TOTAL..... | 27,275       | 21,332          | 78.2             | 35,797    | 27,946          | 78.1             | 24,736    | 19,338          | 78.2             |
| BUREAU OF LAND MANAGEMENT.....         | 62           | 57              | 91.9             | 91        | 81              | 89.0             | 102       | 100             | 98.0             |
| BUREAU OF MINES.....                   | 20,926       | 16,700          | 79.8             | 28,429    | 22,700          | 79.8             | 16,734    | 13,400          | 80.1             |
| BUREAU OF RECLAMATION.....             | 602          | 353             | 58.6             | 616       | 370             | 60.1             | 850       | 510             | 60.0             |
| NATIONAL PARK SERVICE.....             | 110          | 72              | 65.5             | 146       | 95              | 65.1             | 180       | 128             | 65.6             |
| OFFICE OF WATER RES AND TECHNOLOGY..   | 175          | 100             | 57.1             | 615       | 300             | 48.8             | 570       | 510             | 89.5             |
| US FISH AND WILDLIFE SERVICE.....      | 5,400        | 4,050           | 75.0             | 5,900     | 4,400           | 74.6             | 6,300     | 4,700           | 74.6             |
| DEPARTMENT OF JUSTICE, TOTAL.....      | 1,918        | 1,357           | 70.8             | 2,652     | 1,943           | 73.3             | 1,882     | 1,218           | 64.7             |
| BUREAU OF PRISONS.....                 | 555          | 471             | 84.9             | 724       | 473             | 65.3             | 610       | 460             | 75.4             |
| DRUG ENFORCEMENT ADMINISTRATION.....   | 500          | 500             | 100.0            | 1,000     | 1,000           | 100.0            | 400       | 400             | 100.0            |
| FEDERAL BUREAU OF INVESTIGATION.....   | 200          | 200             | 100.0            | 275       | 275             | 100.0            | 225       | 225             | 100.0            |
| IMMIGRATION & NATURALIZATION SERVICE   | 37           | 10              | 27.0             | 100       | 75              | 75.0             | 75        | 25              | 33.3             |
| LAW ENFORCEMENT ASSISTANCE ADMIN.....  | 626          | 176             | 28.1             | 553       | 120             | 21.7             | 572       | 108             | 18.9             |
| DEPARTMENT OF LABOR, TOTAL.....        | 706          | 604             | 85.6             | 697       | 588             | 84.4             | 86        | 80              | 93.0             |
| BUREAU OF LABOR STATISTICS.....        | 476          | 404             | 84.9             | 456       | 388             | 85.1             | -         | -               | -                |
| EMPLOYMENT AND TRAINING ADMIN.....     | 230          | 200             | 87.0             | 241       | 200             | 83.0             | 86        | 80              | 93.0             |
| DEPARTMENT OF STATE, TOTAL.....        | 473          | 142             | 30.0             | 910       | 321             | 35.3             | 765       | 745             | 97.4             |
| DEPARTMENTAL FUNDS.....                | 15           | 5               | 33.3             | 60        | 26              | 43.3             | 15        | 5               | 33.3             |
| AGENCY FOR INTERNATIONAL DEVELOPMENT   | 458          | 137             | 29.9             | 850       | 295             | 34.7             | 750       | 740             | 98.7             |
| DEPT OF TRANSPORTATION, TOTAL.....     | 71,965       | 39,455          | 54.8             | 83,831    | 44,766          | 53.4             | 77,193    | 40,881          | 53.0             |
| FEDERAL AVIATION ADMINISTRATION.....   | 27,902       | 13,140          | 47.3             | 27,580    | 15,170          | 55.0             | 24,035    | 13,220          | 55.0             |
| FEDERAL HIGHWAY ADMINISTRATION.....    | 6,380        | 5,420           | 85.0             | 6,385     | 5,430           | 85.0             | 6,530     | 5,550           | 85.0             |
| FEDERAL RAILROAD ADMINISTRATION.....   | 9,828        | 2,460           | 25.0             | 14,133    | 3,530           | 25.0             | 9,095     | 2,270           | 25.0             |
| NAT'L HIGHWAY TRAFFIC SAFETY ADMIN..   | 1,560        | 860             | 55.1             | 1,542     | 850             | 55.1             | 1,700     | 930             | 54.7             |
| OFFICE OF THE SECRETARY.....           | 10,767       | 6,355           | 59.1             | 13,136    | 9,906           | 75.4             | 9,216     | 6,381           | 69.2             |
| RESEARCH & SPECIAL PROGRAM DIRECTATE   | -            | -               | -                | 200       | 50              | 25.0             | 5,352     | 2,410           | 45.0             |
| US COAST GUARD.....                    | 3,580        | 1,250           | 34.9             | 3,950     | 1,380           | 34.9             | 3,400     | 1,190           | 35.0             |
| URBAN MASS TRANSPORTATION ADMIN.....   | 15,948       | 7,970           | 50.0             | 16,905    | 8,450           | 50.0             | 17,855    | 8,930           | 50.0             |

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TABLE C-109: FEDERAL OBLIGATIONS FOR TOTAL DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS,  
BY AGENCY: FISCAL YEARS 1977, 1978, AND 1979

(THOUSANDS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                    | ACTUAL, 1977 |                 |                  | ESTIMATES |                 |                  |         |                 |                  |
|-------------------------------------------|--------------|-----------------|------------------|-----------|-----------------|------------------|---------|-----------------|------------------|
|                                           | TOTAL        | PERSONNEL COSTS | PERCENT OF TOTAL | 1978      |                 |                  | 1979    |                 |                  |
|                                           |              |                 |                  | TOTAL     | PERSONNEL COSTS | PERCENT OF TOTAL | TOTAL   | PERSONNEL COSTS | PERCENT OF TOTAL |
| DEPARTMENT OF THE TREASURY, TOTAL.....    | 1,600        | 1,091           | 68.2             | 1,803     | 1,023           | 56.7             | 2,193   | 1,515           | 69.1             |
| BUREAU OF ALCOHOL TOBACCO & FIREARMS..... | 15           | 15              | 100.0            | 24        | 24              | 100.0            | 300     | 300             | 100.0            |
| BUREAU OF ENGRAVING AND PRINTING.....     | 800          | 576             | 72.0             | 554       | 399             | 72.0             | 743     | 535             | 72.0             |
| CUSTOMS SERVICE.....                      | 785          | 500             | 63.7             | 1,225     | 600             | 49.0             | 1,150   | 680             | 59.1             |
| OTHER AGENCIES                            |              |                 |                  |           |                 |                  |         |                 |                  |
| ACTION.....                               | 29           | 27              | 93.1             | 41        | 38              | 92.7             | 42      | 39              | 92.9             |
| APPALACHIAN REGIONAL COMMISSION.....      | 5            | 4               | 80.0             | 10        | 8               | 80.0             | 10      | 8               | 80.0             |
| CIVIL SERVICE COMMISSION.....             | 1,320        | 1,320           | 100.0            | 1,217     | 1,217           | 100.0            | 1,217   | 1,217           | 100.0            |
| COMMUNITY SERVICES ADMINISTRATION.....    | 1,500        | 1,500           | 100.0            | 1,500     | 1,500           | 100.0            | 1,500   | 1,500           | 100.0            |
| CONSUMER PRODUCT SAFETY COMMISSION.....   | 1,512        | 366             | 24.2             | 1,266     | 480             | 37.9             | 1,412   | 480             | 34.0             |
| ENVIRONMENTAL PROTECTION AGENCY.....      | 41,611       | 14,461          | 34.8             | 35,853    | 12,907          | 36.0             | 37,600  | 13,354          | 35.5             |
| GENERAL SERVICES ADMINISTRATION.....      | 13           | 10              | 76.9             | 16        | 14              | 77.8             | 23      | 17              | 73.9             |
| INTERNATIONAL COMMUNICATION AGENCY.....   | 33           | 9               | 27.3             | 38        | 10              | 26.3             | 25      | 7               | 28.0             |
| LIBRARY OF CONGRESS.....                  | 3,060        | 2,539           | 83.0             | 3,624     | 3,015           | 83.2             | 3,800   | 3,022           | 79.5             |
| NATIONAL AERONAUTICS & SPACE ADMIN.....   | 435,694      | 313,736         | 72.0             | 441,279   | 320,463         | 72.6             | 434,816 | 307,136         | 70.6             |
| NATIONAL SCIENCE FOUNDATION.....          | 3            | 3               | 100.0            | 2         | 2               | 100.0            | 3       | 3               | 100.0            |
| TENNESSEE VALLEY AUTHORITY.....           | 3,589        | 2,871           | 80.0             | 4,764     | 3,811           | 80.0             | 5,278   | 4,222           | 80.0             |
| US ARMS CONTROL & DISARMAMENT AGENCY..    | 60           | 48              | 80.0             | 80        | 40              | 50.0             | 120     | 65              | 54.2             |
| VETERANS ADMINISTRATION.....              | 14,260       | 9,626           | 67.5             | 14,241    | 9,857           | 69.2             | 14,144  | 9,799           | 69.3             |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-110. FEDERAL OUTLAYS FOR RESEARCH, DEVELOPMENT, AND R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | 1969     | 1970     | 1971     | 1972     | 1973     | 1974     | 1975     | 1976     | 1977     | ESTIMATES |          |
|-----------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                                                           |          |          |          |          |          |          |          |          |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                  | 10,347.0 | 15,735.0 | 19,973.2 | 16,728.9 | 17,489.1 | 18,302.2 | 19,533.8 | 21,005.6 | 23,363.5 | 26,147.9  | 28,145.9 |
| DEPARTMENTS                                               |          |          |          |          |          |          |          |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                     | 202.0    | 298.0    | 318.9    | 357.5    | 357.1    | 381.5    | 425.0    | 468.0    | 537.8    | 640.1     | 605.3    |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....      | -        | -        | -        | -        | -        | -        | -        | -        | 30.5     | 34.7      | 35.8     |
| FOREST SERVICE.....                                       | 42.9     | 45.0     | 50.2     | 56.5     | 58.3     | 65.6     | 72.5     | 90.3     | 92.5     | 107.9     | 92.6     |
| SCIENCE AND EDUCATION ADMIN.....                          | 60.0     | 62.5     | 69.1     | 73.7     | 82.1     | 85.2     | 95.6     | 104.2    | 120.2    | 151.5     | 155.4    |
| COOPERATIVE RESEARCH.....                                 | 100.1    | 172.0    | 182.8    | 208.7    | 199.3    | 210.5    | 232.8    | 247.4    | 294.6    | 340.0     | 321.6    |
| FEDERAL RESEARCH.....                                     | 4.1      | 3.1      | 4.1      | 3.1      | 3.1      | 2.1      | 1.1      | 0.1      | -        | -         | -        |
| NATIONAL AGRICULTURAL LIBRARY.....                        | 14.9     | 17.4     | 16.4     | 18.8     | 17.1     | 20.0     | 24.6     | 26.9     | -        | -         | -        |
| OTHER AGRICULTURE.....                                    | -        | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        |
| DEPARTMENT OF COMMERCE, TOTAL.....                        | 70.4     | 127.9    | 122.7    | 168.2    | 186.2    | 188.2    | 224.6    | 233.3    | 238.2    | 277.0     | 301.4    |
| ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION.....        | 20.9     | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL BUREAU OF STANDARDS.....                         | 30.0     | 31.3     | 33.5     | 34.7     | 36.0     | 42.5     | 47.2     | 49.1     | 53.1     | 54.4      | 61.1     |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....      | -        | 72.3     | 68.4     | 109.7    | 114.4    | 109.5    | 127.7    | 134.5    | 132.6    | 160.5     | 175.0    |
| OTHER COMMERCE.....                                       | 21.2     | 24.3     | 21.0     | 23.8     | 35.0     | 36.2     | 49.7     | 49.7     | 52.5     | 64.1      | 65.3     |
| DEPARTMENT OF DEFENSE, TOTAL.....                         | 7,000.4  | 7,507.9  | 7,706.0  | 8,297.2  | 8,597.6  | 8,979.7  | 9,363.5  | 9,445.5  | 10,308.0 | 11,381.6  | 12,408.0 |
| DEPARTMENT OF THE ARMY.....                               | 1,607.0  | 1,771.0  | 1,670.0  | 1,689.0  | 2,042.4  | 2,308.6  | 2,083.0  | 1,969.6  | 2,195.0  | 2,448.9   | 2,735.9  |
| DEPARTMENT OF THE NAVY.....                               | 2,108.0  | 2,172.4  | 2,477.9  | 2,501.5  | 2,498.9  | 2,715.8  | 3,126.3  | 3,320.1  | 3,582.6  | 3,910.7   | 4,304.2  |
| DEPARTMENT OF THE AIR FORCE.....                          | 3,020.3  | 3,150.1  | 3,025.0  | 3,426.2  | 3,588.5  | 3,442.3  | 3,567.6  | 3,625.2  | 3,902.2  | 4,330.5   | 4,509.3  |
| DEFENSE AGENCIES.....                                     | 24.2     | 40.0     | 52.7     | 47.5     | 46.3     | 48.2     | 55.9     | 507.5    | 610.5    | 664.0     | 828.0    |
| DEPARTMENTWIDE FUNDS.....                                 | 9.2      | 5.9      | 4.5      | 4.0      | 3.0      | 2.3      | 3.0      | 2.2      | 1.2      | 2.5       | 4.4      |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....             | -        | -        | -        | -        | 3.4      | 25.5     | 26.8     | 20.9     | 16.5     | 19.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                 | -        | -        | -        | -        | -        | -        | -        | -        | 3,593.1  | 4,441.3   | 4,797.0  |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 1,220.0  | 1,261.3  | 1,326.0  | 1,554.5  | 1,878.4  | 1,960.6  | 2,166.2  | 2,615.0  | 2,622.2  | 3,001.9   | 3,228.4  |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | -        | -        | -        | -        | 112.0    | 127.3    | 114.1    | 145.1    | 167.2    | 173.1     | 196.9    |
| HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION.....     | 144.1    | 160.5    | 195.5    | 236.9    | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL INSTITUTE OF EDUCATION.....                      | 93.9     | 94.6     | 114.8    | 108.0    | 102.2    | 66.3     | 53.1     | 56.8     | 30.3     | 31.2      | 32.1     |
| NATIONAL INSTITUTES OF HEALTH.....                        | 202.9    | 217.7    | 246.0    | 212.1    | 1,373.7  | 1,435.4  | 1,604.4  | 2,118.4  | 2,105.0  | 2,457.9   | 2,614.8  |
| OFFICE OF EDUCATION.....                                  | 93.9     | 94.6     | 114.8    | 108.0    | 102.2    | 66.3     | 53.1     | 56.8     | 30.3     | 31.2      | 32.1     |
| OTHER HEW.....                                            | 98.1     | 68.5     | 70.5     | 97.5     | 254.1    | 234.7    | 231.8    | 224.9    | 260.1    | 266.0     | 297.8    |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....          | 13.3     | 15.3     | 40.5     | 50.1     | 47.8     | 58.4     | 58.7     | 60.3     | 69.0     | 60.6      | 64.0     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                    | 234.2    | 159.8    | 185.1    | 214.5    | 254.1    | 199.6    | 250.6    | 304.0    | 287.8    | 352.0     | 361.9    |
| BUREAU OF MINES.....                                      | 35.0     | 37.3     | 50.0     | 66.2     | 68.6     | 66.7     | 107.9    | 113.7    | 103.7    | 106.8     | 110.8    |
| GEOLOGICAL SURVEY.....                                    | 25.2     | 40.8     | 44.1     | 51.7     | 62.7     | 73.4     | 74.7     | 125.0    | 123.2    | 160.8     | 171.5    |
| OTHER INTERIOR.....                                       | 23.9     | 61.7     | 91.0     | 96.6     | 122.8    | 59.5     | 66.0     | 65.3     | 61.9     | 85.1      | 79.6     |
| DEPARTMENT OF JUSTICE, TOTAL.....                         | 4.5      | 3.6      | 9.9      | 11.9     | 22.2     | 40.5     | 43.8     | 39.9     | 33.7     | 43.5      | 41.0     |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....            | 3.3      | 2.5      | 7.0      | 9.6      | 19.9     | 34.5     | 39.2     | 35.2     | 27.6     | 32.7      | 32.2     |
| OTHER JUSTICE.....                                        | 1.2      | 1.1      | 2.9      | 2.3      | 2.3      | 6.0      | 4.6      | 4.7      | 6.2      | 10.8      | 8.8      |
| DEPARTMENT OF LABOR.....                                  | 14.7     | 19.0     | 22.1     | 23.0     | 16.3     | 22.5     | 25.4     | 27.8     | 28.1     | 32.1      | 31.9     |
| DEPARTMENT OF STATE, TOTAL.....                           | 12.5     | 21.5     | 29.5     | 21.7     | 20.8     | 24.8     | 28.6     | 27.0     | 44.1     | 60.6      | 68.6     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                 | 12.0     | 21.0     | 29.1     | 21.2     | 19.3     | 23.2     | 27.4     | 25.4     | 41.8     | 63.6      | 65.9     |
| OTHER STATE.....                                          | 0.5      | 0.5      | 0.4      | 0.5      | 1.5      | 1.6      | 1.2      | 1.6      | 2.3      | 2.9       | 2.6      |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                  | 200.0    | 202.6    | 477.8    | 287.0    | 337.3    | 363.7    | 339.2    | 335.7    | 363.5    | 398.6     | 367.4    |
| FEDERAL AVIATION ADMINISTRATION.....                      | 149.9    | 23.9     | 340.1    | 107.1    | 80.6     | 115.8    | 113.7    | 114.6    | 102.8    | 125.7     | 110.9    |
| FEDERAL HIGHWAY ADMINISTRATION.....                       | 27.7     | 32.5     | 28.5     | 23.3     | 23.5     | 33.5     | 26.8     | 42.9     | 53.0     | 50.5      | 64.6     |
| FEDERAL RAILROAD ADMINISTRATION.....                      | 14.7     | 11.4     | 25.6     | 22.5     | 41.4     | 38.3     | 51.1     | 48.5     | 57.3     | 63.8      | 53.0     |
| NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.....       | -        | 19.5     | 22.9     | 34.8     | 47.6     | 44.4     | 36.2     | 33.8     | 49.5     | 51.2      | 51.2     |
| URBAN MASS TRANSPORTATION ADMINISTRATION.....             | 14.0     | 9.5      | 19.1     | 60.8     | 72.2     | 57.8     | 60.9     | 48.2     | 52.1     | 51.3      | 60.6     |
| OTHER TRANSPORTATION.....                                 | 10.1     | 135.8    | 41.6     | 38.5     | 64.0     | 73.9     | 50.5     | 47.7     | 48.8     | 50.1      | 46.9     |
| DEPARTMENT OF THE TREASURY.....                           | 0.1      | 0.1      | 0.1      | 1.3      | 1.0      | 1.1      | 1.7      | 3.8      | 9.0      | 6.7       | 8.1      |

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TABLE C-110. FEDERAL OUTLAYS FOR RESEARCH, DEVELOPMENT, AND R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                                 | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |         |
|--------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
|                                                        |         |         |         |         |         |         |         |         |         | 1978      | 1979    |
| OTHER AGENCIES                                         |         |         |         |         |         |         |         |         |         |           |         |
| ATOMIC ENERGY COMMISSION.....                          | 1,654.0 | 1,616.0 | 1,604.9 | 1,551.3 | 1,624.4 | -       | -       | -       | -       | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT<br>ADMINISTRATION..... | -       | -       | -       | -       | -       | 1,825.0 | 2,246.6 | 2,553.7 | -       | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..                      | -       | 70.2    | 101.0   | 133.8   | 147.7   | 172.2   | 218.6   | 265.6   | 283.0   | 312.0     | 315.7   |
| NATIONAL AERONAUTICS AND SPACE<br>ADMINISTRATION.....  | 4,251.7 | 3,753.1 | 3,381.9 | 3,622.9 | 3,315.2 | 3,256.2 | 3,266.5 | 3,669.0 | 3,945.3 | 3,981.6   | 4,270.1 |
| NATIONAL SCIENCE FOUNDATION.....                       | 342.3   | 324.1   | 373.9   | 435.0   | 470.9   | 584.7   | 600.4   | 669.1   | 674.7   | 749.8     | 784.7   |
| NUCLEAR REGULATORY COMMISSION....                      | -       | -       | -       | -       | -       | 46.1    | 58.5    | 76.9    | 107.8   | 130.5     | 153.0   |
| OFFICE OF ECONOMIC OPPORTUNITY....                     | 77.1    | 79.3    | 129.5   | 81.2    | 76.9    | -       | -       | -       | -       | -         | -       |
| VETERANS ADMINISTRATION.....                           | 54.0    | 61.7    | 67.9    | 76.1    | 82.8    | 85.7    | 97.0    | 109.5   | 112.8   | 121.0     | 121.4   |
| ALL OTHER AGENCIES.....                                | 61.1    | 72.5    | 73.8    | 41.3    | 50.4    | 111.7   | 118.3   | 100.7   | 109.5   | 143.8     | 176.8   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-111. FEDERAL OUTLAYS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: FISCAL YEARS 1969-79  
(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                                 | 1969     | 1970     | 1971     | 1972     | 1973     | 1974     | 1975     | 1976     | 1977     | ESTIMATES |          |
|------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                                                                        |          |          |          |          |          |          |          |          |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                               | 15,695.4 | 15,157.0 | 15,360.5 | 16,164.4 | 16,851.0 | 17,558.0 | 18,703.9 | 20,205.0 | 22,563.2 | 24,759.6  | 26,741.0 |
| DEPARTMENTS                                                            |          |          |          |          |          |          |          |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                                  | 270.1    | 205.0    | 311.3    | 348.1    | 348.9    | 375.6    | 417.7    | 460.0    | 515.3    | 603.0     | 503.0    |
| ECONOMICS, STATISTICS, AND<br>COOPERATIVES SERVICE.....                | -        | -        | -        | -        | -        | -        | -        | -        | 30.5     | 34.7      | 35.8     |
| FOREST SERVICE.....                                                    | 40.0     | 44.9     | 49.1     | 55.2     | 54.7     | 63.3     | 68.6     | 86.9     | 89.0     | 104.4     | 91.8     |
| SCIENCE AND EDUCATION ADMIN<br>COOPERATIVE RESEARCH.....               | 50.3     | 61.1     | 67.8     | 73.1     | 81.0     | 85.0     | 95.5     | 104.2    | 120.1    | 151.5     | 155.4    |
| FEDERAL RESEARCH.....                                                  | 150.4    | 151.3    | 177.7    | 200.9    | 194.7    | 207.1    | 228.0    | 242.0    | 275.6    | 313.0     | 300.7    |
| NATIONAL AGRICULTURAL LIBRARY.....                                     | .4       | .3       | .4       | .3       | .3       | .2       | .1       | .1       | -        | -         | -        |
| OTHER AGRICULTURE.....                                                 | 14.4     | 17.4     | 16.3     | 10.6     | 17.0     | 20.0     | 24.7     | 26.9     | -        | -         | -        |
| DEPARTMENT OF COMMERCE, TOTAL.....                                     | 75.1     | 122.9    | 118.2    | 164.1    | 180.4    | 176.3    | 214.1    | 225.5    | 232.5    | 269.6     | 297.3    |
| ENVIRONMENTAL SCIENCE SERVICES<br>ADMINISTRATION.....                  | 26.1     | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL BUREAU OF STANDARDS.....                                      | 27.5     | 29.1     | 31.8     | 33.7     | 35.6     | 40.7     | 45.3     | 48.0     | 52.6     | 51.0      | 60.0     |
| NATIONAL OCEANIC AND<br>ATMOSPHERIC ADMINISTRATION.....                | -        | 69.4     | 65.4     | 107.0    | 110.9    | 101.6    | 119.8    | 129.4    | 131.2    | 150.2     | 175.0    |
| OTHER COMMERCE.....                                                    | 21.5     | 24.4     | 21.0     | 23.4     | 33.9     | 34.0     | 49.0     | 48.1     | 48.0     | 60.4      | 62.3     |
| DEPARTMENT OF DEFENSE, TOTAL.....                                      | 7,660.5  | 7,447.1  | 7,561.5  | 8,138.8  | 8,440.8  | 8,814.9  | 9,210.6  | 9,301.3  | 10,182.4 | 10,982.9  | 12,047.5 |
| DEPARTMENT OF THE ARMY.....                                            | 1,577.3  | 1,753.5  | 1,637.9  | 1,859.4  | 1,996.4  | 2,277.2  | 2,053.1  | 1,949.0  | 2,180.2  | 2,428.5   | 2,701.9  |
| DEPARTMENT OF THE NAVY.....                                            | 2,000.0  | 2,150.8  | 2,459.4  | 2,962.1  | 2,466.4  | 2,668.3  | 3,078.5  | 3,260.8  | 3,519.0  | 3,845.5   | 4,216.0  |
| DEPARTMENT OF THE AIR FORCE.....                                       | 3,523.8  | 3,088.5  | 2,975.9  | 3,362.6  | 3,533.1  | 3,374.1  | 3,513.1  | 3,568.1  | 3,862.2  | 4,036.5   | 4,207.3  |
| DEFENSE AGENCIES.....                                                  | 480.0    | 448.4    | 493.8    | 450.7    | 438.3    | 467.4    | 536.2    | 500.3    | 603.3    | 650.9     | 810.9    |
| DEPARTMENTAL FUNDS.....                                                | 9.2      | 5.9      | 4.5      | 4.0      | 3.0      | 2.3      | 3.0      | 2.2      | 1.2      | 2.5       | 4.4      |
| DIRECTOR OF TEST AND<br>EVALUATION, DEFENSE.....                       | -        | -        | -        | -        | 3.4      | 25.5     | 26.8     | 20.9     | 16.5     | 19.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                              | -        | -        | -        | -        | -        | -        | -        | -        | 3,166.0  | 3,849.4   | 4,130.3  |
| DEPARTMENT OF HEALTH, EDUCATION,<br>AND WELFARE, TOTAL.....            | 1,100.7  | 1,217.9  | 1,282.5  | 1,516.7  | 1,815.7  | 1,927.3  | 2,080.3  | 2,562.6  | 2,576.6  | 2,907.9   | 3,142.0  |
| ALCOHOL, DRUG ABUSE AND MENTAL<br>HEALTH ADMINISTRATION.....           | -        | -        | -        | -        | 112.6    | 127.3    | 114.1    | 145.1    | 167.2    | 173.0     | 190.7    |
| HEALTH SERVICES AND MENTAL<br>HEALTH ADMINISTRATION.....               | 143.7    | 180.2    | 195.0    | 236.9    | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL INSTITUTE OF EDUCATION<br>NATIONAL INSTITUTES OF HEALTH.....  | 852.3    | 876.6    | 905.8    | 1,087.4  | 1,333.3  | 1,407.6  | 1,602.8  | 2,066.5  | 2,063.7  | 2,385.8   | 2,534.2  |
| OFFICE OF EDUCATION.....                                               | 93.4     | 92.7     | 111.2    | 94.9     | 94.0     | 62.8     | 53.1     | 58.8     | 30.3     | 31.2      | 32.1     |
| OTHER HEW.....                                                         | 87.3     | 68.4     | 70.5     | 97.5     | 240.0    | 232.7    | 227.5    | 224.4    | 255.8    | 264.3     | 293.0    |
| DEPARTMENT OF HOUSING AND URBAN<br>DEVELOPMENT.....                    | 13.3     | 15.3     | 40.5     | 50.1     | 47.8     | 58.4     | 58.7     | 60.3     | 69.0     | 60.6      | 64.0     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                                 | 195.0    | 151.6    | 178.1    | 209.8    | 237.8    | 198.0    | 246.2    | 303.2    | 283.3    | 339.4     | 357.1    |
| BUREAU OF MINES.....                                                   | 35.2     | 40.8     | 44.1     | 51.7     | 62.5     | 73.4     | 107.9    | 125.0    | 100.7    | 101.5     | 108.5    |
| GEOLOGICAL SURVEY.....                                                 | 35.6     | 37.3     | 50.0     | 66.2     | 68.6     | 66.7     | 76.7     | 113.7    | 123.2    | 160.8     | 171.5    |
| OTHER INTERIOR.....                                                    | 124.0    | 73.5     | 84.0     | 91.9     | 106.7    | 57.9     | 63.6     | 64.5     | 59.4     | 77.1      | 77.0     |
| DEPARTMENT OF JUSTICE, TOTAL.....                                      | 4.5      | 3.6      | 9.5      | 11.9     | 22.2     | 40.5     | 43.8     | 39.9     | 33.7     | 43.5      | 41.0     |
| LAW ENFORCEMENT ASSISTANCE<br>ADMINISTRATION.....                      | 3.3      | 2.5      | 7.8      | 9.6      | 19.9     | 34.5     | 39.2     | 35.2     | 27.6     | 32.7      | 32.2     |
| OTHER JUSTICE.....                                                     | 1.2      | 1.1      | 2.1      | 2.3      | 2.3      | 6.0      | 4.6      | 4.7      | 6.2      | 10.8      | 8.8      |
| DEPARTMENT OF LABOR.....                                               | 12.7     | 19.0     | 22.1     | 23.0     | 18.3     | 22.5     | 25.4     | 27.8     | 28.1     | 34.1      | 31.9     |
| DEPARTMENT OF STATE, TOTAL.....                                        | 13.4     | 21.4     | 28.5     | 18.4     | 29.2     | 24.5     | 28.4     | 25.9     | 40.1     | 62.6      | 81.6     |
| AGENCY FOR INTERNATIONAL<br>DEVELOPMENT.....                           | 12.9     | 20.9     | 28.2     | 17.9     | 18.7     | 23.0     | 27.1     | 24.3     | 37.8     | 59.6      | 78.9     |
| OTHER STATE.....                                                       | .4       | .5       | .4       | .6       | 1.5      | 1.6      | 1.2      | 1.6      | 2.3      | 2.9       | 2.8      |
| DEPARTMENT OF TRANSPORTATION,<br>TOTAL.....                            | 203.2    | 258.9    | 468.2    | 273.7    | 312.3    | 328.4    | 324.5    | 323.6    | 346.0    | 374.0     | 369.0    |
| FEDERAL AVIATION ADMINISTRATION<br>FEDERAL HIGHWAY ADMINISTRATION..... | 149.0    | 53.7     | 339.3    | 106.1    | 86.1     | 115.2    | 110.9    | 112.7    | 99.8     | 117.1     | 109.4    |
| FEDERAL RAILROAD ADMINISTRATION.....                                   | 39.1     | 32.4     | 28.3     | 22.8     | 23.4     | 33.1     | 26.4     | 42.5     | 52.6     | 50.1      | 63.5     |
| NATIONAL HIGHWAY TRAFFIC SAFETY<br>ADMINISTRATION.....                 | 11.0     | 0.4      | 21.0     | 16.7     | 31.6     | 34.4     | 42.0     | 40.5     | 45.6     | 50.6      | 40.0     |
| URBAN MASS TRANSPORTATION<br>ADMINISTRATION.....                       | -        | 19.5     | 22.5     | 34.8     | 47.6     | 44.4     | 36.2     | 33.8     | 49.3     | 51.0      | 51.0     |
| OTHER TRANSPORTATION.....                                              | 16.0     | 9.5      | 10.6     | 56.9     | 69.0     | 54.1     | 59.1     | 46.9     | 50.4     | 49.6      | 56.9     |
| DEPARTMENT OF THE TREASURY.....                                        | 0.0      | 0.0      | 0.0      | 1.3      | 1.0      | 1.1      | 1.7      | 3.7      | 4.9      | 6.7       | 8.0      |

CONTINUED ON NEXT PAGE



TABLE C-112. FEDERAL OUTLAYS FOR R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                      | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |         |
|-------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|---------|
|                                                             |       |       |       |       |       |       |       |       |       | 1978      | 1979    |
| TOTAL, ALL AGENCIES.....                                    | 652.2 | 578.9 | 612.7 | 564.4 | 638.0 | 704.2 | 829.9 | 800.6 | 800.2 | 1,308.3   | 1,403.6 |
| DEPARTMENTS                                                 |       |       |       |       |       |       |       |       |       |           |         |
| DEPARTMENT OF AGRICULTURE, TOTAL..                          | 13.7  | 13.6  | 7.6   | 9.7   | 8.6   | 9.9   | 7.9   | 8.8   | 22.5  | 36.6      | 21.7    |
| DEPARTMENT OF COMMERCE, TOTAL.....                          | 3.3   | 5.1   | 4.7   | 4.1   | 9.8   | 11.9  | 10.3  | 7.8   | 9.7   | 7.3       | 4.2     |
| DEPARTMENT OF DEFENSE, TOTAL.....                           | 207.9 | 140.8 | 144.9 | 158.4 | 157.0 | 164.9 | 152.9 | 144.2 | 125.6 | 398.7     | 361.3   |
| DEPARTMENT OF THE ARMY.....                                 | 32.4  | 18.2  | 32.7  | 30.4  | 46.0  | 31.4  | 30.0  | 20.6  | 14.8  | 20.4      | 34.0    |
| DEPARTMENT OF THE NAVY.....                                 | 28.8  | 21.6  | 28.4  | 39.4  | 32.5  | 47.5  | 47.8  | 59.3  | 63.6  | 65.2      | 88.2    |
| DEPARTMENT OF THE AIR FORCE.....                            | 112.6 | 61.5  | 49.7  | 63.6  | 55.4  | 68.2  | 54.9  | 87.1  | 40.0  | 300.9     | 222.0   |
| DEFENSE AGENCIES.....                                       | 34.2  | 39.6  | 33.7  | 25.0  | 23.0  | 17.7  | 20.6  | 7.2   | 7.2   | 13.1      | 17.1    |
| DEPARTMENT OF ENERGY.....                                   | -     | -     | -     | -     | -     | -     | -     | -     | 427.1 | 591.9     | 660.6   |
| DEPARTMENT OF HEALTH, EDUCATION,<br>AND WELFARE, TOTAL..... | 33.3  | 43.3  | 44.3  | 37.8  | 62.7  | 33.3  | 85.9  | 52.4  | 45.6  | 94.0      | 85.6    |
| DEPARTMENT OF THE INTERIOR, TOTAL                           | 8.4   | 8.3   | 7.0   | 4.7   | 16.3  | 1.6   | 2.4   | .8    | 4.4   | 13.4      | 4.6     |
| DEPARTMENT OF STATE, TOTAL.....                             | .1    | .1    | 1.0   | 3.3   | .6    | .2    | .3    | 1.2   | 4.0   | 6.0       | 7.0     |
| DEPARTMENT OF TRANSPORTATION,<br>TOTAL.....                 | 4.8   | 3.7   | 9.6   | 13.3  | 25.0  | 35.4  | 14.7  | 12.1  | 17.5  | 24.6      | 18.4    |
| DEPARTMENT OF THE TREASURY.....                             | -     | -     | -     | -     | -     | -     | -     | .1    | .1    | .1        | .1      |
| OTHER AGENCIES                                              |       |       |       |       |       |       |       |       |       |           |         |
| ATOMIC ENERGY COMMISSION.....                               | 248.1 | 270.0 | 302.0 | 253.6 | 261.2 | -     | -     | -     | -     | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT<br>ADMINISTRATION.....      | -     | -     | -     | -     | -     | 336.1 | 411.2 | 364.2 | -     | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..                           | -     | 2.1   | .4    | .7    | 3.0   | 10.9  | 11.3  | 6.7   | 1.6   | 2.6       | 2.7     |
| NATIONAL AERONAUTICS AND SPACE<br>ADMINISTRATION.....       | 65.3  | 56.6  | 44.1  | 50.3  | 44.7  | 75.1  | 85.3  | 120.9 | 105.0 | 132.5     | 154.0   |
| NATIONAL SCIENCE FOUNDATION.....                            | 62.3  | 31.2  | 39.2  | 17.5  | 43.1  | 14.0  | 29.1  | 50.1  | 25.1  | 34.3      | 35.6    |
| NUCLEAR REGULATORY COMMISSION....                           | -     | -     | -     | -     | -     | 3.8   | 2.6   | 3.5   | 6.1   | 9.8       | 8.5     |
| VETERANS ADMINISTRATION.....                                | 4.2   | 3.7   | 7.0   | 9.6   | 7.8   | 5.3   | 2.2   | 11.8  | 5.9   | 7.1       | 6.2     |
| ALL OTHER AGENCIES.....                                     | .8    | .4    | 1.3   | 1.4   | 7.2   | 5.8   | 13.6  | 16.0  | 4.0   | 31.3      | 33.0    |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-111. FEDERAL OUTLAYS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                                 | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |        |
|--------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|--------|
|                                                        |         |         |         |         |         |         |         |         |         | 1978      | 1979   |
| OTHER AGENCIES                                         |         |         |         |         |         |         |         |         |         |           |        |
| ATOMIC ENERGY COMMISSION.....                          | 1,405.9 | 1,346.0 | 1,302.9 | 1,297.7 | 1,363.2 | -       | -       | -       | -       | -         | -      |
| ENERGY RESEARCH AND DEVELOPMENT<br>ADMINISTRATION..... | -       | -       | -       | -       | -       | 1,488.9 | 1,835.6 | 2,189.5 | -       | -         | -      |
| ENVIRONMENTAL PROTECTION AGENCY..                      | -       | 68.1    | 100.6   | 133.1   | 144.7   | 161.3   | 207.2   | 259.0   | 281.3   | 310.0     | 313.   |
| NATIONAL AERONAUTICS AND SPACE<br>ADMINISTRATION.....  | 4,186.4 | 3,696.5 | 3,337.8 | 3,372.5 | 3,270.5 | 3,181.1 | 3,181.2 | 3,548.1 | 3,840.3 | 3,849.1   | 4,116. |
| NATIONAL SCIENCE FOUNDATION.....                       | 280.0   | 292.9   | 334.7   | 417.5   | 427.8   | 570.7   | 571.3   | 619.0   | 649.6   | 715.3     | 749.   |
| NUCLEAR REGULATORY COMMISSION....                      | -       | -       | -       | -       | -       | 42.3    | 55.0    | 73.3    | 101.7   | 120.7     | 144.   |
| OFFICE OF ECONOMIC OPPORTUNITY....                     | 77.1    | 79.3    | 129.5   | 81.2    | 76.9    | -       | -       | -       | -       | -         | -      |
| VETERANS ADMINISTRATION.....                           | 49.0    | 58.0    | 60.8    | 66.5    | 75.0    | 80.4    | 94.8    | 97.7    | 106.9   | 113.9     | 115.   |
| ALL OTHER AGENCIES.....                                | 60.3    | 72.1    | 72.6    | 40.0    | 48.1    | 105.8   | 104.8   | 84.6    | 105.5   | 112.4     | 143.   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-113. FEDERAL OBLIGATIONS FOR RESEARCH, DEVELOPMENT, AND RED PLANT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                       | 1969      | 1970     | 1971     | 1972     | 1973     | 1974     | 1975     | 1976     | 1977     | ESTIMATES |          |
|--------------------------------------------------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                                                              |           |          |          |          |          |          |          |          |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                     | 116,310.1 | 15,864.8 | 16,156.2 | 17,099.8 | 17,576.4 | 18,181.0 | 19,809.1 | 21,560.2 | 25,296.3 | 28,086.9  | 29,320.0 |
| DEPARTMENTS                                                  |           |          |          |          |          |          |          |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL..                           | 270.0     | 286.4    | 310.0    | 357.4    | 369.4    | 387.5    | 427.9    | 478.6    | 559.9    | 665.1     | 651.2    |
| ECONOMICS, STATISTICS, AND<br>COOPERATIVES SERVICE.....      | -         | -        | -        | -        | -        | -        | -        | -        | 30.5     | 34.8      | 35.8     |
| FOREST SERVICE.....                                          | 39.0      | 43.7     | 47.1     | 58.7     | 59.6     | 69.8     | 81.5     | 82.8     | 92.1     | 109.1     | 102.9    |
| SCIENCE AND EDUCATION ADMIN<br>COOPERATIVE RESEARCH.....     | 96.3      | 62.1     | 67.8     | 62.6     | 89.4     | 89.4     | 101.1    | 113.4    | 127.3    | 157.7     | 157.6    |
| FEDERAL RESEARCH.....                                        | 158.5     | 164.0    | 177.5    | 198.0    | 201.2    | 208.3    | 221.6    | 255.3    | 310.1    | 363.5     | 355.0    |
| NATIONAL AGRICULTURAL LIBRARY                                | .4        | .2       | .4       | .2       | .3       | .1       | *        | *        | -        | -         | -        |
| OTHER AGRICULTURE.....                                       | 16.8      | 16.4     | 17.2     | 17.9     | 18.9     | 20.1     | 23.7     | 27.1     | -        | -         | -        |
| DEPARTMENT OF COMMERCE, TOTAL....                            | 75.3      | 125.5    | 152.9    | 194.7    | 198.5    | 192.2    | 224.9    | 235.5    | 251.8    | 296.9     | 319.3    |
| ENVIRONMENTAL SCIENCE SERVICES<br>ADMINISTRATION.....        | 26.9      | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL BUREAU OF STANDARDS...                              | 29.1      | 30.8     | 33.8     | 36.6     | 38.9     | 41.1     | 44.6     | 47.9     | 53.9     | 57.0      | 66.2     |
| NATIONAL OCEANIC AND<br>ATMOSPHERIC ADMINISTRATION...        | -         | 66.4     | 83.4     | 120.1    | 119.3    | 117.0    | 135.1    | 139.1    | 147.2    | 162.8     | 175.0    |
| OTHER COMMERCE.....                                          | 19.3      | 28.3     | 35.7     | 38.0     | 40.3     | 34.1     | 43.2     | 48.5     | 50.7     | 77.2      | 78.1     |
| DEPARTMENT OF DEFENSE, TOTAL.....                            | 7,890.0   | 7,500.9  | 7,662.7  | 8,492.9  | 8,550.6  | 8,589.5  | 9,179.6  | 9,798.1  | 11,409.0 | 12,125.8  | 13,032.1 |
| DEPARTMENT OF THE ARMY.....                                  | 1,666.5   | 1,687.0  | 1,726.0  | 2,103.7  | 2,030.7  | 2,042.0  | 1,920.7  | 2,026.0  | 2,458.2  | 2,635.0   | 2,871.0  |
| DEPARTMENT OF THE NAVY.....                                  | 2,159.7   | 2,276.1  | 2,311.7  | 2,559.7  | 2,690.5  | 2,772.6  | 3,162.8  | 3,373.8  | 3,878.6  | 4,117.5   | 4,596.8  |
| DEPARTMENT OF THE AIR FORCE....                              | 3,604.2   | 3,049.1  | 3,163.2  | 3,325.1  | 3,344.1  | 3,203.9  | 3,573.1  | 3,799.6  | 4,381.1  | 4,579.2   | 4,660.6  |
| DEFENSE AGENCIES.....                                        | 454.6     | 484.6    | 458.8    | 500.6    | 457.1    | 464.1    | 497.4    | 573.9    | 659.5    | 760.3     | 891.4    |
| DEPARTMENT-WIDE FUNDS.....                                   | 5.0       | 4.1      | 3.0      | 4.0      | 3.2      | 2.7      | 1.7      | .7       | 1.3      | 6.9       | 5.2      |
| DIRECTOR OF TEST AND<br>EVALUATION, DEFENSE.....             | -         | -        | -        | -        | 25.1     | 24.2     | 23.9     | 24.1     | 30.2     | 27.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                    | -         | -        | -        | -        | -        | -        | -        | -        | 4,097.2  | 5,135.2   | 4,965.7  |
| DEPARTMENT OF HEALTH, EDUCATION,<br>AND WELFARE, TOTAL.....  | 1,350.2   | 1,252.2  | 1,493.4  | 1,808.1  | 1,879.1  | 2,331.0  | 2,402.2  | 2,579.0  | 2,920.0  | 3,219.5   | 3,323.4  |
| ALCOHOL, DRUG ABUSE AND MENTAL<br>HEALTH ADMINISTRATION..... | -         | -        | -        | -        | 122.2    | 155.6    | 139.4    | 139.5    | 153.0    | 163.4     | 203.2    |
| HEALTH SERVICES AND MENTAL<br>HEALTH ADMINISTRATION.....     | 187.1     | 188.4    | 223.5    | 249.8    | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL INSTITUTE OF EDUCATION                              | -         | -        | -        | -        | 106.8    | 475.7    | 69.9     | 63.7     | 64.9     | 84.6      | 94.4     |
| NATIONAL INSTITUTES OF HEALTH..                              | 919.8     | 893.2    | 1,055.3  | 1,321.1  | 1,355.2  | 1,777.3  | 1,883.9  | 2,054.8  | 2,375.7  | 2,605.1   | 2,657.4  |
| OFFICE OF EDUCATION.....                                     | 115.7     | 99.5     | 132.8    | 130.2    | 58.3     | 51.5     | 45.9     | 58.2     | 31.1     | 32.4      | 33.1     |
| OTHER HEW.....                                               | 127.6     | 71.1     | 81.8     | 105.0    | 236.3    | 270.9    | 263.1    | 262.8    | 295.3    | 334.1     | 335.3    |
| DEPARTMENT OF HOUSING AND URBAN<br>DEVELOPMENT.....          | 18.2      | 29.9     | 47.7     | 49.1     | 57.8     | 64.8     | 62.0     | 67.6     | 52.1     | 68.5      | 69.0     |
| DEPARTMENT OF THE INTERIOR, TOTAL                            | 241.8     | 168.5    | 202.2    | 234.1    | 265.3    | 198.7    | 290.7    | 320.2    | 301.2    | 390.2     | 362.4    |
| BUREAU OF MINES.....                                         | 35.3      | 41.0     | 44.1     | 53.2     | 67.0     | 70.8     | 114.5    | 119.2    | 105.3    | 130.6     | 103.0    |
| GEOLOGICAL SURVEY.....                                       | 35.0      | 46.5     | 60.3     | 70.9     | 77.5     | 66.1     | 107.6    | 131.3    | 128.9    | 162.6     | 173.5    |
| OTHER INTERIOR.....                                          | 151.5     | 81.0     | 97.8     | 110.0    | 121.0    | 61.8     | 68.6     | 69.7     | 67.0     | 97.0      | 85.9     |
| DEPARTMENT OF JUSTICE, TOTAL.....                            | 4.8       | 8.6      | 10.3     | 23.4     | 33.2     | 34.7     | 44.3     | 33.9     | 27.7     | 67.5      | 42.1     |
| LAW ENFORCEMENT ASSISTANCE<br>ADMINISTRATION.....            | 3.7       | 7.4      | 7.5      | 21.0     | 30.4     | 27.3     | 40.9     | 29.2     | 21.8     | 53.9      | 33.1     |
| OTHER JUSTICE.....                                           | 1.1       | 1.2      | 2.8      | 2.4      | 2.8      | 7.4      | 3.4      | 4.7      | 5.8      | 13.6      | 9.0      |
| DEPARTMENT OF LABOR.....                                     | 14.2      | 20.6     | 22.8     | 23.1     | 19.9     | 23.8     | 25.4     | 28.5     | 29.6     | 32.2      | 32.1     |
| DEPARTMENT OF STATE, TOTAL.....                              | 20.6      | 27.6     | 39.0     | 29.2     | 26.6     | 22.9     | 27.9     | 44.5     | 77.6     | 63.7      | 90.3     |
| AGENCY FOR INTERNATIONAL<br>DEVELOPMENT.....                 | 19.7      | 27.3     | 38.6     | 28.6     | 25.1     | 21.4     | 26.7     | 42.9     | 75.3     | 60.8      | 87.5     |
| OTHER STATE.....                                             | .9        | .3       | .4       | .6       | 1.5      | 1.5      | 1.2      | 1.6      | 2.3      | 4.9       | 2.8      |
| DEPARTMENT OF TRANSPORTATION,<br>TOTAL.....                  | 437.5     | 333.3    | 508.0    | 336.3    | 348.9    | 383.2    | 324.8    | 308.7    | 377.1    | 437.1     | 392.8    |
| FEDERAL AVIATION ADMINISTRATION                              | 140.9     | 56.3     | 347.4    | 100.9    | 81.0     | 125.4    | 109.0    | 108.1    | 106.4    | 130.6     | 106.9    |
| FEDERAL HIGHWAY ADMINISTRATION..                             | 40.7      | 32.9     | 27.1     | 20.8     | 23.7     | 41.2     | 45.1     | 29.3     | 55.9     | 56.1      | 58.9     |
| FEDERAL RAILROAD ADMINISTRATION                              | 15.3      | 16.4     | 25.3     | 38.6     | 46.9     | 37.4     | 39.4     | 60.5     | 58.5     | 75.9      | 55.7     |
| NATIONAL HIGHWAY TRAFFIC SAFETY<br>ADMINISTRATION.....       | -         | 19.5     | 26.7     | 50.0     | 54.6     | 53.6     | 34.0     | 31.4     | 47.2     | 48.3      | 52.9     |
| URBAN MASS TRANSPORTATION<br>ADMINISTRATION.....             | 18.5      | 20.0     | 43.0     | 63.9     | 74.4     | 69.2     | 49.4     | 48.8     | 61.6     | 70.0      | 68.6     |
| OTHER TRANSPORTATION.....                                    | 41.9      | 168.2    | 38.5     | 44.1     | 68.3     | 56.4     | 47.9     | 38.6     | 47.5     | 58.2      | 49.8     |
| DEPARTMENT OF THE TREASURY.....                              | .6        | .6       | .8       | 1.3      | 1.0      | 1.1      | 1.7      | 3.8      | 4.9      | 6.9       | 7.8      |

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TABLE C-113. FEDERAL OBLIGATIONS FOR RESEARCH, DEVELOPMENT, AND R&amp;D PLANT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION             | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |         |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
|                                    |         |         |         |         |         |         |         |         |         | 1978      | 1979    |
| OTHER AGENCIES                     |         |         |         |         |         |         |         |         |         |           |         |
| ATOMIC ENERGY COMMISSION.....      | 1,708.5 | 1,611.9 | 1,615.2 | 1,544.4 | 1,712.3 | -       | -       | -       | -       | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT    |         |         |         |         |         |         |         |         |         |           |         |
| ADMINISTRATION.....                | -       | -       | -       | -       | -       | 1,881.6 | 2,439.9 | 2,902.6 | -       | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..  | -       | 90.5    | 137.8   | 123.0   | 205.1   | 170.5   | 259.7   | 265.4   | 297.6   | 334.3     | 332.6   |
| NATIONAL AERONAUTICS AND SPACE     |         |         |         |         |         |         |         |         |         |           |         |
| ADMINISTRATION.....                | 4,018.1 | 3,833.4 | 3,298.2 | 3,202.5 | 3,130.2 | 3,100.5 | 3,207.1 | 3,529.0 | 3,821.5 | 4,038.8   | 4,345.0 |
| NATIONAL SCIENCE FOUNDATION.....   | 300.7   | 312.3   | 364.8   | 473.5   | 537.0   | 568.1   | 618.1   | 661.8   | 724.1   | 790.2     | 867.6   |
| NUCLEAR REGULATORY COMMISSION....  | -       | -       | -       | -       | -       | 46.1    | 67.2    | 98.1    | 119.4   | 140.0     | 163.5   |
| OFFICE OF ECONOMIC OPPORTUNITY.... | 70.6    | 123.4   | 134.0   | 92.7    | 87.8    | -       | -       | -       | -       | -         | -       |
| VETERANS ADMINISTRATION.....       | 54.3    | 61.2    | 77.9    | 71.3    | 84.6    | 86.9    | 97.0    | 109.5   | 112.9   | 123.1     | 121.4   |
| ALL OTHER AGENCIES.....            | 55.9    | 78.0    | 78.5    | 44.8    | 66.9    | 97.9    | 108.7   | 95.4    | 112.9   | 151.7     | 181.9   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-116. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: FISCAL YEARS 1969-79  
(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                       | 1969     | 1970     | 1971     | 1972     | 1973     | 1974     | 1975     | 1976     | 1977     | ESTIMATES |          |
|--------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                                                              |          |          |          |          |          |          |          |          |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                     | 15,441.1 | 15,340.3 | 15,545.0 | 16,497.8 | 16,800.1 | 17,414.7 | 18,988.4 | 20,723.5 | 23,929.1 | 26,419.5  | 27,972.2 |
| DEPARTMENTS                                                  |          |          |          |          |          |          |          |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                        | 260.1    | 281.2    | 304.9    | 349.6    | 366.5    | 378.7    | 420.1    | 462.4    | 547.0    | 632.5     | 636.0    |
| ECONOMICS, STATISTICS, AND<br>COOPERATIVES SERVICE.....      | -        | -        | -        | -        | -        | -        | -        | -        | 30.5     | 34.8      | 35.8     |
| FOREST SERVICE.....                                          | 39.0     | 42.8     | 46.0     | 55.2     | 58.4     | 65.5     | 78.2     | 79.9     | 90.3     | 106.5     | 102.9    |
| SCIENCE AND EDUCATION ADMIN<br>COOPERATIVE RESEARCH.....     | 58.3     | 61.1     | 67.8     | 82.6     | 89.4     | 89.4     | 101.1    | 113.4    | 127.3    | 157.7     | 157.6    |
| FEDERAL RESEARCH.....                                        | 147.8    | 160.6    | 173.5    | 193.8    | 199.5    | 203.5    | 217.1    | 242.1    | 248.9    | 333.5     | 339.8    |
| NATIONAL AGRICULTURAL LIBRARY<br>OTHER AGRICULTURE.....      | 4.4      | 2.2      | 4.1      | 2.2      | 3.1      | 1.1      | 9.1      | 9.1      | -        | -         | -        |
| 14.6                                                         | 16.4     | 17.2     | 17.8     | 18.9     | 20.2     | 23.7     | 27.0     | -        | -        | -         | -        |
| DEPARTMENT OF COMMERCE, TOTAL.....                           | 72.1     | 121.6    | 143.7    | 187.3    | 190.6    | 180.6    | 215.4    | 228.9    | 244.7    | 287.7     | 315.1    |
| ENVIRONMENTAL SCIENCE SERVICES<br>ADMINISTRATION.....        | 25.9     | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL BUREAU OF STANDARDS.....                            | 46.9     | 29.6     | 32.6     | 34.7     | 36.8     | 40.2     | 43.2     | 47.4     | 53.2     | 55.8      | 66.0     |
| NATIONAL OCEANIC AND<br>ATMOSPHERIC ADMINISTRATION.....      | -        | 63.8     | 79.0     | 115.2    | 115.6    | 109.1    | 128.0    | 135.1    | 145.7    | 160.5     | 175.0    |
| OTHER COMMERCE.....                                          | 19.3     | 28.2     | 32.1     | 37.4     | 38.2     | 31.3     | 44.2     | 46.4     | 45.8     | 72.3      | 74.1     |
| DEPARTMENT OF DEFENSE, TOTAL.....                            | 7,696.3  | 7,360.4  | 7,509.0  | 8,318.1  | 8,404.2  | 8,420.4  | 9,012.5  | 9,654.7  | 10,963.4 | 11,824.7  | 12,837.7 |
| DEPARTMENT OF THE ARMY.....                                  | 1,643.8  | 1,659.8  | 1,682.4  | 2,064.2  | 2,013.6  | 2,009.9  | 1,896.7  | 2,013.7  | 2,441.9  | 2,602.1   | 2,833.1  |
| DEPARTMENT OF THE NAVY.....                                  | 2,124.2  | 2,257.9  | 2,283.7  | 2,519.4  | 2,654.8  | 2,718.5  | 3,100.2  | 3,328.0  | 3,817.4  | 4,056.6   | 4,501.9  |
| DEPARTMENT OF THE AIR FORCE.....                             | 3,498.5  | 2,990.0  | 3,113.5  | 3,254.3  | 3,273.5  | 3,216.2  | 3,513.5  | 3,726.6  | 4,031.1  | 4,399.2   | 4,615.6  |
| DEFENSE AGENCIES.....                                        | 424.8    | 448.6    | 426.5    | 476.4    | 434.1    | 448.9    | 476.5    | 561.6    | 641.4    | 733.0     | 854.8    |
| DEPARTMENT-WIDE FUNDS.....                                   | 5.0      | 4.1      | 3.0      | 4.0      | 3.2      | 2.7      | 1.7      | 7.1      | 1.3      | 8.9       | 5.2      |
| DIRECTOR OF TEST AND<br>EVALUATION, DEFENSE.....             | -        | -        | -        | -        | 25.1     | 24.2     | 23.9     | 24.1     | 30.2     | 27.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                    | -        | -        | -        | -        | -        | -        | -        | -        | 3,536.2  | 4,195.8   | 4,175.0  |
| DEPARTMENT OF HEALTH, EDUCATION,<br>AND WELFARE, TOTAL.....  | 1,297.6  | 1,221.0  | 1,476.1  | 1,751.1  | 1,837.6  | 2,290.1  | 2,363.1  | 2,545.9  | 2,787.3  | 3,131.5   | 3,271.1  |
| ALCOHOL, DRUG ABUSE AND MENTAL<br>HEALTH ADMINISTRATION..... | -        | -        | -        | -        | 122.2    | 155.6    | 139.4    | 139.5    | 153.0    | 163.0     | 203.2    |
| HEALTH SERVICES AND MENTAL<br>HEALTH ADMINISTRATION.....     | 186.9    | 188.4    | 222.9    | 244.8    | -        | -        | -        | -        | -        | -         | -        |
| NATIONAL INSTITUTE OF EDUCATION.....                         | -        | -        | -        | -        | 106.8    | 75.7     | 69.9     | 63.7     | 64.9     | 84.6      | 94.4     |
| NATIONAL INSTITUTES OF HEALTH.....                           | 892.9    | 873.3    | 1,039.0  | 1,271.3  | 1,314.2  | 1,736.8  | 1,845.5  | 2,022.6  | 2,243.9  | 2,520.6   | 2,606.3  |
| OFFICE OF EDUCATION.....                                     | 96.8     | 88.2     | 132.4    | 130.1    | 58.3     | 51.5     | 45.9     | 58.2     | 31.1     | 32.4      | 33.1     |
| OTHER HEW.....                                               | 120.8    | 71.1     | 81.8     | 104.9    | 236.1    | 270.5    | 262.4    | 261.9    | 294.5    | 330.9     | 334.0    |
| DEPARTMENT OF HOUSING AND URBAN<br>DEVELOPMENT.....          | 18.2     | 29.9     | 47.7     | 49.1     | 57.8     | 64.8     | 62.0     | 67.6     | 52.1     | 68.5      | 69.0     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                       | 207.6    | 157.9    | 193.7    | 220.3    | 243.4    | 196.6    | 286.8    | 314.2    | 296.3    | 372.3     | 359.4    |
| BUREAU OF MINES.....                                         | 35.3     | 41.0     | 44.1     | 53.1     | 66.3     | 70.4     | 114.5    | 119.2    | 101.9    | 121.3     | 103.0    |
| GEOLOGICAL SURVEY.....                                       | 35.0     | 46.5     | 60.3     | 70.9     | 77.5     | 66.1     | 107.6    | 131.3    | 128.9    | 162.6     | 173.5    |
| OTHER INTERIOR.....                                          | 137.3    | 70.4     | 89.3     | 96.3     | 99.6     | 60.1     | 64.7     | 63.7     | 65.4     | 88.5      | 83.0     |
| DEPARTMENT OF JUSTICE, TOTAL.....                            | 4.8      | 8.6      | 10.3     | 23.4     | 33.2     | 34.7     | 44.3     | 33.9     | 27.7     | 67.5      | 42.1     |
| LAW ENFORCEMENT ASSISTANCE<br>ADMINISTRATION.....            | 3.7      | 7.4      | 7.5      | 21.0     | 30.4     | 27.3     | 40.9     | 29.2     | 21.8     | 53.9      | 33.1     |
| OTHER JUSTICE.....                                           | 1.1      | 1.2      | 2.8      | 2.4      | 2.8      | 7.4      | 3.4      | 4.7      | 5.8      | 13.6      | 9.0      |
| DEPARTMENT OF LABOR.....                                     | 14.2     | 20.6     | 22.8     | 23.1     | 19.9     | 23.8     | 25.4     | 28.5     | 29.6     | 32.2      | 32.1     |
| DEPARTMENT OF STATE, TOTAL.....                              | 20.3     | 27.6     | 30.1     | 26.6     | 26.2     | 22.5     | 27.9     | 39.4     | 61.4     | 62.9      | 84.4     |
| AGENCY FOR INTERNATIONAL<br>DEVELOPMENT.....                 | 19.5     | 27.3     | 29.7     | 26.0     | 24.7     | 21.1     | 26.7     | 37.8     | 59.1     | 60.0      | 81.7     |
| OTHER STATE.....                                             | .9       | .3       | .4       | .6       | 1.5      | 1.5      | 1.2      | 1.6      | 2.3      | 2.9       | 2.8      |
| DEPARTMENT OF TRANSPORTATION,<br>TOTAL.....                  | 431.8    | 327.8    | 497.2    | 310.5    | 310.6    | 369.8    | 311.6    | 294.5    | 354.6    | 407.5     | 372.2    |
| FEDERAL AVIATION ADMINISTRATION.....                         | 140.0    | 56.1     | 346.3    | 100.9    | 79.5     | 125.0    | 105.6    | 98.1     | 103.4    | 121.0     | 106.3    |
| FEDERAL HIGHWAY ADMINISTRATION.....                          | 40.1     | 32.8     | 26.8     | 20.7     | 23.6     | 40.8     | 44.7     | 28.9     | 55.5     | 55.7      | 57.6     |
| FEDERAL RAILROAD ADMINISTRATION.....                         | 11.7     | 11.5     | 21.6     | 26.3     | 35.5     | 33.5     | 32.4     | 50.4     | 41.9     | 59.0      | 39.7     |
| NATIONAL HIGHWAY TRAFFIC SAFETY<br>ADMINISTRATION.....       | -        | 19.5     | 26.7     | 50.0     | 94.6     | 93.6     | 34.0     | 31.4     | 47.0     | 48.1      | 52.7     |
| URBAN MASS TRANSPORTATION<br>ADMINISTRATION.....             | 18.5     | 20.0     | 39.0     | 58.8     | 66.2     | 65.6     | 47.7     | 47.2     | 59.9     | 68.3      | 66.9     |
| OTHER TRANSPORTATION.....                                    | 21.5     | 187.9    | 36.8     | 53.8     | 51.2     | 51.3     | 47.2     | 38.2     | 46.9     | 55.4      | 49.0     |
| DEPARTMENT OF THE TREASURY.....                              | .9       | .9       | .8       | 1.3      | 1.0      | 1.1      | 1.7      | 3.7      | 6.8      | 6.9       | 7.8      |

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TABLE C-114. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

- CONTINUED

| AGENCY AND SUBDIVISION                                 | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |         |
|--------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
|                                                        |         |         |         |         |         |         |         |         |         | 1978      | 1979    |
| OTHER AGENCIES                                         |         |         |         |         |         |         |         |         |         |           |         |
| ATOMIC ENERGY COMMISSION.....                          | 1,405.9 | 1,346.0 | 1,302.9 | 1,297.7 | 1,363.2 | -       | -       | -       | -       | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT<br>ADMINISTRATION..... | -       | -       | -       | -       | -       | 1,488.9 | 2,047.4 | 2,463.8 | -       | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..                      | -       | 88.5    | 136.7   | 122.4   | 180.6   | 169.2   | 257.7   | 259.1   | 295.5   | 331.0     | 330.0   |
| NATIONAL AERONAUTICS AND SPACE<br>ADMINISTRATION.....  | 3,963.3 | 3,799.9 | 3,257.9 | 3,157.2 | 3,060.9 | 3,002.2 | 3,066.4 | 3,446.8 | 3,703.4 | 3,876.5   | 4,192.5 |
| NATIONAL SCIENCE FOUNDATION.....                       | 273.8   | 289.0   | 336.9   | 454.8   | 479.9   | 556.4   | 595.0   | 609.3   | 697.0   | 753.6     | 828.7   |
| NUCLEAR REGULATORY COMMISSION....                      | -       | -       | -       | -       | -       | 42.3    | 84.2    | 88.4    | 112.3   | 132.1     | 155.0   |
| OFFICE OF ECONOMIC OPPORTUNITY....                     | 70.6    | 123.4   | 134.0   | 92.7    | 87.8    | -       | -       | -       | -       | -         | -       |
| VETERANS ADMINISTRATION.....                           | 50.2    | 58.6    | 62.9    | 69.1    | 74.3    | 84.8    | 94.8    | 97.7    | 107.0   | 116.0     | 115.2   |
| ALL OTHER AGENCIES.....                                | 55.9    | 77.4    | 77.4    | 43.5    | 62.4    | 87.3    | 94.1    | 84.7    | 109.0   | 120.2     | 148.9   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-115. FEDERAL OBLIGATIONS FOR RED PLANT, BY AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                      | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977    | ESTIMATES |         |
|-------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-----------|---------|
|                                                             |       |       |       |       |       |       |       |       |         | 1978      | 1979    |
| TOTAL, ALL AGENCIES.....                                    | 669.0 | 524.4 | 611.2 | 602.1 | 774.3 | 766.3 | 820.7 | 836.7 | 1,367.2 | 1,667.4   | 1,347.9 |
| DEPARTMENTS                                                 |       |       |       |       |       |       |       |       |         |           |         |
| DEPARTMENT OF AGRICULTURE, TOTAL..                          | 10.7  | 5.3   | 5.1   | 7.6   | 2.9   | 8.8   | 7.8   | 16.1  | 12.9    | 32.6      | 15.2    |
| DEPARTMENT OF COMMERCE, TOTAL....                           | 3.2   | 3.9   | 9.2   | 7.4   | 7.9   | 11.6  | 9.5   | 6.6   | 7.1     | 9.2       | 4.2     |
| DEPARTMENT OF DEFENSE, TOTAL.....                           | 193.8 | 140.6 | 153.7 | 174.7 | 146.4 | 169.1 | 167.1 | 143.4 | 445.6   | 301.1     | 214.4   |
| DEPARTMENT OF THE ARMY.....                                 | 22.7  | 27.2  | 43.6  | 39.5  | 17.1  | 32.1  | 23.9  | 12.3  | 16.3    | 32.9      | 37.9    |
| DEPARTMENT OF THE NAVY.....                                 | 35.5  | 18.2  | 28.0  | 40.4  | 35.7  | 54.0  | 62.7  | 45.8  | 61.2    | 60.9      | 94.9    |
| DEPARTMENT OF THE AIR FORCE.....                            | 105.6 | 59.2  | 49.7  | 70.8  | 70.6  | 67.7  | 59.6  | 73.0  | 350.0   | 140.0     | 45.0    |
| DEFENSE AGENCIES.....                                       | 30.0  | 36.0  | 32.3  | 24.1  | 23.0  | 15.3  | 20.9  | 12.3  | 18.1    | 27.3      | 36.6    |
| DEPARTMENT OF ENERGY.....                                   | -     | -     | -     | -     | -     | -     | -     | -     | 561.0   | 939.4     | 790.7   |
| DEPARTMENT OF HEALTH, EDUCATION,<br>AND WELFARE, TOTAL..... | 52.8  | 31.2  | 17.4  | 55.0  | 41.6  | 40.9  | 39.1  | 33.1  | 132.6   | 88.0      | 52.3    |
| DEPARTMENT OF THE INTERIOR, TOTAL                           | 14.2  | 10.6  | 8.5   | 13.8  | 22.0  | 2.1   | 3.9   | 5.9   | 5.0     | 17.8      | 2.9     |
| DEPARTMENT OF TRANSPORTATION,<br>TOTAL.....                 | 5.6   | 5.5   | 10.8  | 25.8  | 38.2  | 13.4  | 13.3  | 14.2  | 22.5    | 29.6      | 20.6    |
| OTHER AGENCIES                                              |       |       |       |       |       |       |       |       |         |           |         |
| ATOMIC ENERGY COMMISSION.....                               | 302.5 | 265.9 | 312.2 | 246.7 | 349.1 | -     | -     | -     | -       | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT<br>ADMINISTRATION.....      | -     | -     | -     | -     | -     | 392.7 | 392.6 | 438.8 | -       | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..                           | -     | 2.0   | 1.1   | .7    | 24.5  | 1.2   | 2.1   | 6.3   | 2.1     | 3.3       | 2.6     |
| NATIONAL AERONAUTICS AND SPACE<br>ADMINISTRATION.....       | 54.8  | 33.4  | 40.2  | 45.2  | 69.3  | 98.4  | 142.7 | 82.1  | 118.1   | 162.3     | 152.5   |
| NATIONAL SCIENCE FOUNDATION.....                            | 26.9  | 23.3  | 27.9  | 18.6  | 57.1  | 11.7  | 23.1  | 52.6  | 27.1    | 36.6      | 38.9    |
| NUCLEAR REGULATORY COMMISSION.....                          | -     | -     | -     | -     | -     | 3.8   | 3.0   | 9.6   | 7.1     | 7.9       | 8.4     |
| VETERANS ADMINISTRATION.....                                | 4.1   | 2.6   | 15.0  | 2.2   | 10.3  | 2.1   | 2.2   | 11.8  | 5.9     | 7.1       | 6.2     |
| ALL OTHER AGENCIES.....                                     | .4    | .1    | 10.1  | 4.2   | 5.0   | 10.5  | 14.3  | 16.2  | 20.2    | 32.4      | 38.9    |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-116. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY CHARACTER OF WORK AND RED PLANT: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| FISCAL YEARS          | TOTAL  | RESEARCH |         | DEVELOPMENT | RED PLANT |
|-----------------------|--------|----------|---------|-------------|-----------|
|                       |        | BASIC    | APPLIED |             |           |
| 1969.....             | 16,310 | 1,779    | 2,956   | 10,906      | 669       |
| 1970.....             | 15,865 | 1,762    | 3,455   | 10,123      | 524       |
| 1971.....             | 16,156 | 1,779    | 3,720   | 10,045      | 611       |
| 1972.....             | 17,100 | 1,974    | 3,867   | 10,657      | 602       |
| 1973.....             | 17,574 | 2,001    | 3,914   | 10,885      | 774       |
| 1974.....             | 18,181 | 2,076    | 4,435   | 10,904      | 766       |
| 1975.....             | 19,809 | 2,279    | 4,798   | 11,911      | 821       |
| 1976.....             | 21,560 | 2,426    | 5,448   | 12,850      | 837       |
| 1977.....             | 25,296 | 2,894    | 5,947   | 15,088      | 1,367     |
| 1978 (ESTIMATED)..... | 28,087 | 3,292    | 6,565   | 16,562      | 1,667     |
| 1979 (ESTIMATED)..... | 29,320 | 3,637    | 6,846   | 17,490      | 1,348     |

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-117. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH, BY SELECTED AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |          |
|-----------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|----------|
|                                                           |         |         |         |         |         |         |         |         |         | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                  | 4,735.2 | 5,217.4 | 5,499.8 | 5,441.0 | 5,915.2 | 6,510.4 | 7,077.0 | 7,873.3 | 8,841.2 | 9,857.5   | 10,482.7 |
| DEPARTMENTS                                               |         |         |         |         |         |         |         |         |         |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                     | 251.3   | 271.9   | 292.2   | 337.2   | 354.1   | 365.1   | 401.9   | 442.2   | 524.0   | 606.5     | 611.5    |
| ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE.....      | -       | -       | -       | -       | -       | -       | -       | -       | 29.7    | 33.9      | 34.9     |
| FOREST SERVICE.....                                       | 38.1    | 41.9    | 45.1    | 52.9    | 56.1    | 62.3    | 73.3    | 74.5    | 86.1    | 101.5     | 98.0     |
| SCIENCE AND EDUCATION ADMIN                               |         |         |         |         |         |         |         |         |         |           |          |
| COOPERATIVE RESEARCH.....                                 | 58.3    | 61.1    | 67.8    | 82.6    | 89.4    | 89.4    | 101.1   | 113.4   | 127.3   | 157.7     | 157.6    |
| FEDERAL RESEARCH.....                                     | 140.1   | 152.5   | 161.8   | 183.9   | 189.7   | 193.4   | 204.1   | 227.6   | 281.0   | 313.5     | 321.0    |
| NATIONAL AGRICULTURAL LIBRARY                             | .4      | .2      | .4      | .2      | .3      | .1      | *       | *       | -       | -         | -        |
| OTHER AGRICULTURE.....                                    | 14.4    | 16.2    | 17.1    | 17.6    | 18.6    | 19.9    | 23.4    | 26.7    | -       | -         | -        |
| DEPARTMENT OF COMMERCE, TOTAL.....                        | 55.8    | 94.1    | 113.7   | 143.4   | 130.2   | 129.2   | 144.4   | 155.7   | 176.1   | 193.3     | 220.1    |
| ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION.....        | 20.5    | -       | -       | -       | -       | -       | -       | -       | -       | -         | -        |
| NATIONAL BUREAU OF STANDARDS.....                         | 25.2    | 27.1    | 28.7    | 29.8    | 31.0    | 32.7    | 34.7    | 37.5    | 45.0    | 46.9      | 56.1     |
| NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.....      | -       | 52.9    | 65.6    | 90.2    | 89.1    | 87.1    | 99.7    | 104.8   | 115.8   | 126.9     | 144.0    |
| OTHER COMMERCE.....                                       | 10.1    | 14.1    | 19.4    | 23.4    | 10.1    | 9.4     | 10.0    | 13.4    | 13.4    | 19.5      | 20.0     |
| DEPARTMENT OF DEFENSE, TOTAL.....                         | 1,411.8 | 1,556.8 | 1,613.0 | 1,763.7 | 1,754.9 | 1,760.2 | 1,793.1 | 1,787.8 | 2,041.4 | 2,143.4   | 2,319.5  |
| DEPARTMENT OF THE ARMY.....                               | 274.7   | 291.5   | 339.1   | 351.0   | 361.9   | 348.7   | 335.7   | 306.4   | 433.4   | 439.4     | 476.3    |
| DEPARTMENT OF THE NAVY.....                               | 294.9   | 272.9   | 273.2   | 303.2   | 284.1   | 292.9   | 302.7   | 314.9   | 378.0   | 402.8     | 445.5    |
| DEPARTMENT OF THE AIR FORCE.....                          | 516.5   | 665.0   | 677.2   | 725.2   | 777.2   | 793.6   | 822.4   | 821.6   | 835.3   | 865.7     | 885.4    |
| DEFENSE AGENCIES.....                                     | 320.8   | 323.2   | 320.5   | 380.4   | 328.5   | 322.2   | 330.6   | 344.1   | 393.4   | 428.6     | 507.1    |
| DEPARTMENTWIDE FUNDS.....                                 | 5.0     | 4.1     | 3.0     | 4.0     | 3.2     | 2.7     | 1.7     | .7      | 1.3     | 6.9       | 5.2      |
| DEPARTMENT OF ENERGY.....                                 | -       | -       | -       | -       | -       | -       | -       | -       | 891.3   | 1,005.2   | 1,074.4  |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 1,174.1 | 1,129.3 | 1,302.3 | 1,464.4 | 1,459.1 | 1,851.6 | 1,926.2 | 2,162.9 | 2,433.7 | 2,750.3   | 2,885.8  |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | -       | -       | -       | -       | 122.2   | 155.6   | 139.4   | 136.6   | 152.0   | 162.4     | 201.4    |
| HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION.....     | 159.0   | 160.4   | 179.2   | 200.5   | -       | -       | -       | -       | -       | -         | -        |
| NATIONAL INSTITUTE OF EDUCATION.....                      | -       | -       | -       | -       | 16.1    | 9.5     | 4.1     | 10.8    | 27.1    | 37.0      | 46.9     |
| NATIONAL INSTITUTES OF HEALTH.....                        | 888.1   | 868.8   | 983.9   | 1,131.7 | 1,147.0 | 1,494.5 | 1,605.6 | 1,779.9 | 1,988.1 | 2,245.9   | 2,330.8  |
| OFFICE OF EDUCATION.....                                  | 39.0    | 33.1    | 62.8    | 36.0    | 6.6     | 6.4     | 5.3     | 21.4    | 11.9    | 14.3      | 16.7     |
| OTHER HEW.....                                            | 86.0    | 67.0    | 76.4    | 96.2    | 167.2   | 185.6   | 171.8   | 214.2   | 254.6   | 290.7     | 290.0    |
| DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.....          | 12.2    | 7.1     | 10.5    | 12.7    | 18.4    | 33.8    | 33.5    | 36.9    | 32.7    | 38.1      | 36.3     |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                    | 163.5   | 121.7   | 139.1   | 148.9   | 159.8   | 147.7   | 217.5   | 240.5   | 237.5   | 295.9     | 297.8    |
| BUREAU OF MINES.....                                      | 35.3    | 41.0    | 44.1    | 53.1    | 62.6    | 70.4    | 114.5   | 119.2   | 52.3    | 60.1      | 57.3     |
| GEOLOGICAL SURVEY.....                                    | 30.0    | 33.9    | 38.7    | 40.7    | 41.5    | 30.5    | 52.9    | 73.3    | 128.9   | 162.6     | 173.5    |
| OTHER INTERIOR.....                                       | 98.2    | 46.8    | 56.3    | 55.1    | 55.7    | 46.8    | 50.1    | 48.0    | 56.3    | 73.3      | 67.1     |
| DEPARTMENT OF JUSTICE, TOTAL.....                         | 2.6     | 5.3     | 6.5     | 12.4    | 7.0     | 18.6    | 18.9    | 18.3    | 17.6    | 47.8      | 31.1     |
| LAW ENFORCEMENT ASSISTANCE ADMINISTRATION.....            | 1.8     | 4.5     | 5.0     | 11.2    | 5.5     | 16.9    | 17.9    | 17.7    | 16.4    | 42.4      | 26.8     |
| OTHER JUSTICE.....                                        | .8      | .8      | 1.5     | 1.2     | 1.5     | 1.7     | 1.0     | .6      | 1.2     | 5.4       | 4.3      |
| DEPARTMENT OF LABOR.....                                  | 9.2     | 11.3    | 13.6    | 13.3    | 13.3    | 17.2    | 15.3    | 18.0    | 18.7    | 19.7      | 23.5     |
| DEPARTMENT OF STATE, TOTAL.....                           | 15.9    | 18.9    | 29.0    | 25.7    | 24.6    | 17.8    | 22.5    | 25.1    | 38.3    | 35.8      | 51.8     |
| AGENCY FOR INTERNATIONAL DEVELOPMENT.....                 | 15.0    | 18.6    | 28.6    | 25.2    | 23.9    | 16.8    | 21.7    | 24.0    | 36.2    | 33.4      | 49.5     |
| OTHER STATE.....                                          | .9      | .3      | .4      | .5      | .7      | 1.0     | .8      | 1.1     | 2.1     | 2.4       | 2.3      |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                  | 57.5    | 83.3    | 97.0    | 98.2    | 77.2    | 61.8    | 53.8    | 31.1    | 51.8    | 57.8      | 60.2     |
| DEPARTMENT OF THE TREASURY.....                           | .3      | .3      | .4      | .5      | .4      | .5      | .4      | 1.5     | 2.1     | 2.3       | 2.7      |
| OTHER AGENCIES                                            |         |         |         |         |         |         |         |         |         |           |          |
| ATOMIC ENERGY COMMISSION.....                             | 417.3   | 433.1   | 429.0   | 417.1   | 424.8   | -       | -       | -       | -       | -         | -        |
| ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION.....       | -       | -       | -       | -       | -       | 464.7   | 593.4   | 746.5   | -       | -         | -        |
| ENVIRONMENTAL PROTECTION AGENCY.....                      | -       | 53.0    | 53.8    | 51.1    | 74.3    | 96.3    | 141.7   | 155.4   | 205.3   | 237.8     | 236.1    |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....        | 802.7   | 1,030.2 | 922.7   | 764.6   | 793.9   | 845.7   | 935.1   | 1,222.8 | 1,206.1 | 1,358.5   | 1,451.7  |
| NATIONAL SCIENCE FOUNDATION.....                          | 258.4   | 274.8   | 318.3   | 427.3   | 464.0   | 520.3   | 570.0   | 595.8   | 688.3   | 748.3     | 820.9    |
| NUCLEAR REGULATORY COMMISSION.....                        | -       | -       | -       | -       | -       | 42.3    | 64.2    | 88.4    | 112.3   | 132.1     | 155.0    |
| OFFICE OF ECONOMIC OPPORTUNITY.....                       | 18.4    | 29.4    | 63.1    | 55.3    | 32.3    | -       | -       | -       | -       | -         | -        |
| VETERANS ADMINISTRATION.....                              | 49.5    | 57.8    | 62.1    | 67.1    | 69.7    | 78.7    | 87.1    | 85.1    | 92.3    | 101.4     | 100.7    |
| ALL OTHER AGENCIES.....                                   | 34.7    | 39.1    | 33.5    | 38.1    | 57.2    | 58.9    | 58.0    | 59.3    | 71.7    | 83.4      | 103.8    |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-118. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY SELECTED AGENCY: FISCAL YEARS 1969-79  
(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                       | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |         |
|--------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
|                                                              |         |         |         |         |         |         |         |         |         | 1978      | 1979    |
| TOTAL, ALL AGENCIES.....                                     | 1,778.9 | 1,762.0 | 1,779.4 | 1,974.3 | 2,001.3 | 2,075.5 | 2,279.0 | 2,425.5 | 2,894.1 | 3,292.3   | 3,638.7 |
| DEPARTMENTS                                                  |         |         |         |         |         |         |         |         |         |           |         |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                        | 106.6   | 115.7   | 118.4   | 137.3   | 142.7   | 145.6   | 154.2   | 171.4   | 204.5   | 251.0     | 286.8   |
| ECONOMICS, STATISTICS, AND<br>COOPERATIVES SERVICE.....      | -       | -       | -       | -       | -       | -       | -       | -       | 3.8     | 4.2       | 4.4     |
| FOREST SERVICE.....                                          | 13.7    | 14.5    | 15.7    | 18.3    | 19.3    | 20.7    | 21.1    | 22.6    | 26.7    | 31.1      | 30.0    |
| SCIENCE AND EDUCATION ADMIN<br>COOPERATIVE RESEARCH.....     | 22.2    | 23.2    | 25.8    | 31.4    | 34.0    | 34.0    | 38.4    | 43.1    | 48.4    | 69.2      | 78.5    |
| FEDERAL RESEARCH.....                                        | 66.6    | 73.3    | 72.1    | 82.9    | 84.6    | 85.5    | 91.2    | 101.7   | 125.6   | 146.5     | 153.9   |
| OTHER AGRICULTURE.....                                       | 4.1     | 4.7     | 4.8     | 4.7     | 4.8     | 5.4     | 3.5     | 4.0     | -       | -         | -       |
| DEPARTMENT OF COMMERCE, TOTAL.....                           | 27.3    | 39.2    | 41.8    | 44.0    | 16.3    | 18.2    | 20.1    | 22.3    | 23.2    | 26.7      | 30.5    |
| DEPARTMENT OF DEFENSE, TOTAL.....                            | 276.5   | 246.7   | 261.5   | 270.3   | 257.8   | 243.9   | 235.5   | 248.4   | 294.8   | 329.8     | 371.2   |
| DEPARTMENT OF THE ARMY.....                                  | 58.8    | 45.5    | 46.5    | 55.8    | 44.7    | 48.0    | 37.3    | 39.0    | 58.6    | 61.7      | 65.9    |
| DEPARTMENT OF THE NAVY.....                                  | 92.5    | 81.9    | 85.8    | 92.6    | 83.6    | 83.3    | 88.1    | 95.9    | 115.3   | 130.6     | 151.9   |
| DEPARTMENT OF THE AIR FORCE.....                             | 90.9    | 81.0    | 84.7    | 86.6    | 92.3    | 77.7    | 79.4    | 81.6    | 85.3    | 95.7      | 105.4   |
| DEFENSE AGENCIES.....                                        | 34.3    | 38.3    | 44.5    | 35.4    | 37.2    | 34.9    | 30.7    | 31.9    | 35.6    | 41.8      | 48.0    |
| DEPARTMENT OF ENERGY.....                                    | -       | -       | -       | -       | -       | -       | -       | -       | 389.5   | 432.7     | 468.2   |
| DEPARTMENT OF HEALTH, EDUCATION,<br>AND WELFARE, TOTAL.....  | 370.7   | 387.9   | 397.3   | 461.1   | 458.1   | 561.1   | 592.0   | 652.4   | 757.2   | 866.1     | 982.1   |
| ALCOHOL, DRUG ABUSE AND MENTAL<br>HEALTH ADMINISTRATION..... | -       | -       | -       | -       | 52.6    | 53.3    | 66.2    | 52.6    | 62.7    | 69.3      | 85.1    |
| HEALTH SERVICES AND MENTAL<br>HEALTH ADMINISTRATION.....     | 56.5    | 60.3    | 63.6    | 75.3    | -       | -       | -       | -       | -       | -         | -       |
| NATIONAL INSTITUTES OF HEALTH..                              | 288.5   | 319.4   | 326.5   | 381.4   | 383.7   | 486.3   | 516.7   | 586.6   | 670.5   | 763.1     | 856.0   |
| OTHER HEW.....                                               | 25.7    | 8.2     | 7.2     | 4.4     | 21.8    | 21.5    | 9.1     | 13.2    | 24.0    | 33.7      | 41.0    |
| DEPARTMENT OF THE INTERIOR, TOTAL                            | 54.5    | 49.9    | 52.7    | 57.1    | 66.5    | 74.1    | 109.9   | 113.3   | 128.9   | 158.5     | 167.8   |
| GEOLOGICAL SURVEY.....                                       | 28.5    | 30.7    | 31.6    | 35.5    | 45.5    | 52.6    | 93.6    | 98.5    | 105.6   | 132.0     | 139.4   |
| OTHER INTERIOR.....                                          | 26.0    | 19.2    | 21.1    | 21.6    | 21.0    | 21.5    | 16.3    | 14.8    | 23.3    | 26.5      | 28.5    |
| DEPARTMENT OF TRANSPORTATION,<br>TOTAL.....                  | .2      | .4      | .3      | .5      | .2      | .3      | .1      | -       | -       | -         | -       |
| OTHER AGENCIES                                               |         |         |         |         |         |         |         |         |         |           |         |
| ATOMIC ENERGY COMMISSION.....                                | 285.1   | 286.7   | 276.9   | 268.3   | 275.2   | -       | -       | -       | -       | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT<br>ADMINISTRATION.....       | -       | -       | -       | -       | -       | 269.5   | 312.8   | 345.8   | -       | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..                            | -       | 5.5     | 6.1     | 8.1     | 9.0     | 9.5     | 17.4    | 13.7    | 6.3     | 8.3       | 16.9    |
| NATIONAL AERONAUTICS AND SPACE<br>ADMINISTRATION.....        | 379.5   | 357.5   | 327.3   | 331.6   | 350.3   | 305.9   | 309.3   | 293.2   | 413.8   | 468.1     | 519.8   |
| NATIONAL SCIENCE FOUNDATION.....                             | 247.6   | 245.0   | 272.6   | 367.7   | 392.4   | 415.2   | 486.0   | 523.6   | 624.9   | 688.0     | 754.9   |
| OFFICE OF ECONOMIC OPPORTUNITY...                            | 7.4     | 1.6     | 3.2     | 4.2     | .9      | -       | -       | -       | -       | -         | -       |
| VETERANS ADMINISTRATION.....                                 | 6.4     | 5.3     | 3.1     | 3.2     | 3.2     | 3.6     | 3.9     | 8.9     | 9.1     | 9.5       | 9.8     |
| ALL OTHER AGENCIES.....                                      | 17.1    | 20.6    | 18.2    | 22.9    | 20.7    | 28.6    | 37.8    | 32.5    | 40.0    | 53.6      | 48.8    |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-119. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY SELECTED AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                    | 1969    | 1970    | 1971    | 1972    | 1973    | 1974    | 1975    | 1976    | 1977    | ESTIMATES |         |
|-----------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
|                                                           |         |         |         |         |         |         |         |         |         | 1978      | 1979    |
| TOTAL, ALL AGENCIES.....                                  | 2,956.3 | 3,455.4 | 3,720.4 | 3,866.7 | 3,913.8 | 4,434.9 | 4,798.0 | 5,447.8 | 5,947.1 | 6,545.2   | 6,845.9 |
| DEPARTMENTS                                               |         |         |         |         |         |         |         |         |         |           |         |
| DEPARTMENT OF AGRICULTURE, TOTAL..                        | 144.7   | 156.2   | 173.7   | 199.9   | 211.4   | 219.5   | 247.8   | 270.9   | 319.6   | 355.5     | 344.7   |
| ECONOMICS, STATISTICS AND COOPERATIVES SERVICE.....       | -       | -       | -       | -       | -       | -       | -       | -       | 25.9    | 29.7      | 30.5    |
| FOREST SERVICE.....                                       | 26.5    | 27.4    | 29.5    | 34.6    | 36.8    | 41.6    | 52.2    | 51.9    | 59.4    | 70.4      | 88.0    |
| SCIENCE AND EDUCATION ADMIN                               |         |         |         |         |         |         |         |         |         |           |         |
| COOPERATIVE RESEARCH.....                                 | 36.1    | 37.9    | 42.0    | 51.2    | 55.4    | 55.4    | 62.7    | 70.3    | 78.9    | 88.5      | 79.1    |
| FEDERAL RESEARCH.....                                     | 73.5    | 75.1    | 89.8    | 101.0   | 105.1   | 107.9   | 112.9   | 125.9   | 155.4   | 167.0     | 167.1   |
| NATIONAL AGRICULTURAL LIBRARY                             | .4      | .2      | .4      | .2      | .3      | .1      | *       | *       | -       | -         | -       |
| OTHER AGRICULTURE.....                                    | 10.2    | 11.6    | 12.0    | 12.9    | 13.8    | 14.5    | 20.0    | 22.8    | -       | -         | -       |
| DEPARTMENT OF COMMERCE, TOTAL....                         | 28.6    | 54.9    | 71.9    | 99.4    | 113.8   | 111.0   | 124.4   | 133.4   | 153.0   | 166.5     | 189.6   |
| DEPARTMENT OF DEFENSE, TOTAL....                          | 1,135.4 | 1,310.1 | 1,351.4 | 1,493.3 | 1,497.1 | 1,616.3 | 1,557.6 | 1,539.3 | 1,746.6 | 1,813.6   | 1,948.3 |
| DEPARTMENT OF THE ARMY.....                               | 215.9   | 246.1   | 292.6   | 295.2   | 317.3   | 300.7   | 298.4   | 267.4   | 374.9   | 377.7     | 410.4   |
| DEPARTMENT OF THE NAVY.....                               | 202.4   | 191.0   | 187.4   | 210.6   | 200.5   | 209.7   | 214.6   | 219.0   | 262.6   | 272.2     | 293.6   |
| DEPARTMENT OF THE AIR FORCE.....                          | 425.6   | 584.0   | 592.5   | 638.6   | 684.9   | 715.8   | 743.0   | 740.6   | 750.0   | 770.0     | 780.0   |
| DEFENSE AGENCIES.....                                     | 286.5   | 285.0   | 275.9   | 345.0   | 291.2   | 287.3   | 299.9   | 312.2   | 357.8   | 386.8     | 459.1   |
| DEPARTMENTWIDE FUNDS.....                                 | 5.0     | 4.1     | 3.0     | 4.8     | 3.2     | 2.7     | 1.7     | .7      | 1.3     | 6.9       | 5.2     |
| DEPARTMENT OF ENERGY.....                                 | -       | -       | -       | -       | -       | -       | -       | -       | 501.8   | 572.5     | 606.1   |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL.....  | 803.4   | 741.3   | 905.0   | 1,003.3 | 1,001.0 | 1,290.5 | 1,334.2 | 1,510.5 | 1,676.5 | 1,884.1   | 1,903.7 |
| ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION..... | -       | -       | -       | -       | 66.6    | 102.3   | 73.2    | 84.0    | 89.3    | 93.1      | 116.3   |
| HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION.....     | 102.4   | 100.0   | 115.6   | 125.1   | -       | -       | -       | -       | -       | -         | -       |
| NATIONAL INSTITUTES OF HEALTH..                           | 599.5   | 549.4   | 657.4   | 750.3   | 763.3   | 1,008.2 | 1,088.9 | 1,193.3 | 1,817.6 | 1,482.8   | 1,474.8 |
| OTHER HEW.....                                            | 101.5   | 91.9    | 132.0   | 127.9   | 169.1   | 180.0   | 172.1   | 233.2   | 269.6   | 308.3     | 312.7   |
| DEPARTMENT OF THE INTERIOR, TOTAL                         | 109.0   | 71.8    | 86.4    | 91.8    | 93.3    | 73.6    | 107.6   | 127.2   | 108.6   | 137.5     | 130.0   |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                  | 57.3    | 82.9    | 96.7    | 97.6    | 77.1    | 61.5    | 53.8    | 31.1    | 51.8    | 57.8      | 60.2    |
| OTHER AGENCIES                                            |         |         |         |         |         |         |         |         |         |           |         |
| ATOMIC ENERGY COMMISSION.....                             | 132.2   | 146.4   | 152.1   | 148.8   | 149.6   | -       | -       | -       | -       | -         | -       |
| ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION.....       | -       | -       | -       | -       | -       | 195.2   | 280.7   | 400.7   | -       | -         | -       |
| ENVIRONMENTAL PROTECTION AGENCY..                         | -       | 47.5    | 47.7    | 45.0    | 65.3    | 86.8    | 124.3   | 141.7   | 197.0   | 229.5     | 219.2   |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....        | 423.1   | 672.7   | 595.4   | 433.0   | 443.6   | 539.8   | 625.8   | 929.6   | 792.3   | 890.4     | 932.0   |
| NATIONAL SCIENCE FOUNDATION.....                          | 10.8    | 29.6    | 45.7    | 59.6    | 71.5    | 105.0   | 84.0    | 72.1    | 63.4    | 60.3      | 66.0    |
| NUCLEAR REGULATORY COMMISSION....                         | -       | -       | -       | -       | -       | 42.3    | 64.2    | 88.4    | 112.3   | 132.1     | 155.0   |
| OFFICE OF ECONOMIC OPPORTUNITY....                        | 11.0    | 27.8    | 59.9    | 51.1    | 31.4    | -       | -       | -       | -       | -         | -       |
| VETERANS ADMINISTRATION.....                              | 43.1    | 52.5    | 59.0    | 63.9    | 66.5    | 75.2    | 83.3    | 76.2    | 83.2    | 91.8      | 90.9    |
| ALL OTHER AGENCIES.....                                   | 57.7    | 61.5    | 75.5    | 80.0    | 92.2    | 118.2   | 110.3   | 126.7   | 141.1   | 173.5     | 200.2   |

\* INDICATES AMOUNT LESS THAN \$50,000.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-120. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY SELECTED AGENCY: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| AGENCY AND SUBDIVISION                                   | 1969     | 1970     | 1971     | 1972     | 1973     | 1974     | 1975     | 1976     | 1977     | ESTIMATES |          |
|----------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                                                          |          |          |          |          |          |          |          |          |          | 1978      | 1979     |
| TOTAL, ALL AGENCIES.....                                 | 10,905.9 | 10,122.9 | 10,045.2 | 10,656.7 | 10,884.9 | 10,904.3 | 11,911.4 | 12,850.2 | 15,087.9 | 16,561.9  | 17,489.5 |
| DEPARTMENTS                                              |          |          |          |          |          |          |          |          |          |           |          |
| DEPARTMENT OF AGRICULTURE, TOTAL.....                    | 8.8      | 9.2      | 12.8     | 12.4     | 12.4     | 13.6     | 18.1     | 20.2     | 22.9     | 25.9      | 24.5     |
| DEPARTMENT OF COMMERCE, TOTAL.....                       | 16.2     | 27.5     | 30.0     | 43.9     | 60.4     | 51.4     | 71.0     | 73.1     | 68.6     | 96.5      | 95.0     |
| DEPARTMENT OF DEFENSE, TOTAL.....                        | 6,284.4  | 5,803.6  | 5,896.1  | 6,554.5  | 6,649.3  | 6,660.2  | 7,219.4  | 7,867.0  | 8,922.0  | 9,681.4   | 10,518.1 |
| DEPARTMENT OF THE ARMY.....                              | 1,369.1  | 1,368.3  | 1,343.2  | 1,713.2  | 1,651.6  | 1,661.1  | 1,561.1  | 1,707.2  | 2,008.5  | 2,162.7   | 2,356.8  |
| DEPARTMENT OF THE NAVY.....                              | 1,829.4  | 1,985.0  | 2,010.5  | 2,216.2  | 2,370.7  | 2,425.6  | 2,797.4  | 3,013.1  | 3,439.4  | 3,653.8   | 4,056.4  |
| DEPARTMENT OF THE AIR FORCE.....                         | 2,982.1  | 2,325.0  | 2,436.3  | 2,529.1  | 2,496.3  | 2,422.7  | 2,691.1  | 2,905.0  | 3,195.8  | 3,533.5   | 3,730.2  |
| DEFENSE AGENCIES.....                                    | 103.8    | 125.4    | 106.0    | 96.0     | 105.6    | 126.6    | 145.9    | 217.5    | 248.0    | 304.4     | 347.7    |
| DIRECTOR OF TEST AND EVALUATION, DEFENSE.....            | -        | -        | -        | -        | 25.1     | 24.2     | 23.9     | 24.1     | 30.2     | 27.0      | 27.0     |
| DEPARTMENT OF ENERGY.....                                | -        | -        | -        | -        | -        | -        | -        | -        | 2,645.0  | 3,190.6   | 3,100.6  |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL..... | 123.4    | 91.7     | 173.7    | 286.7    | 378.4    | 438.6    | 436.9    | 383.0    | 353.6    | 381.3     | 385.2    |
| DEPARTMENT OF THE INTERIOR, TOTAL.....                   | 44.1     | 36.2     | 54.7     | 71.4     | 83.6     | 48.9     | 69.3     | 73.7     | 58.7     | 76.4      | 61.6     |
| DEPARTMENT OF TRANSPORTATION, TOTAL.....                 | 174.4    | 244.5    | 400.2    | 212.3    | 233.4    | 308.0    | 257.7    | 263.4    | 302.8    | 349.7     | 312.1    |
| OTHER AGENCIES                                           |          |          |          |          |          |          |          |          |          |           |          |
| ATOMIC ENERGY COMMISSION.....                            | 988.6    | 912.9    | 873.9    | 880.5    | 938.4    | -        | -        | -        | -        | -         | -        |
| ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION.....      | -        | -        | -        | -        | -        | 1,024.2  | 1,453.9  | 1,717.3  | -        | -         | -        |
| ENVIRONMENTAL PROTECTION AGENCY..                        | -        | 35.5     | 82.9     | 718.3    | 106.3    | 72.9     | 115.9    | 103.7    | 90.2     | 93.2      | 93.9     |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.....       | 3,160.7  | 2,769.7  | 2,335.2  | 2,392.6  | 2,267.0  | 2,156.5  | 2,129.3  | 2,224.0  | 2,497.3  | 2,518.0   | 2,740.8  |
| NATIONAL SCIENCE FOUNDATION.....                         | 15.4     | 14.2     | 18.7     | 27.6     | 15.9     | 38.2     | 25.0     | 13.5     | 8.7      | 9.3       | 7.9      |
| OFFICE OF ECONOMIC OPPORTUNITY...                        | 52.2     | 94.0     | 70.8     | 37.4     | 55.5     | -        | -        | -        | -        | -         | -        |
| VETERANS ADMINISTRATION.....                             | .7       | .9       | .8       | 2.0      | 4.5      | 6.1      | 7.7      | 12.6     | 14.7     | 14.6      | 14.5     |
| ALL OTHER AGENCIES.....                                  | 37.0     | 83.0     | 95.4     | 64.1     | 79.8     | 87.7     | 107.2    | 98.7     | 103.4    | 131.2     | 135.2    |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-121. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY PERFORMER: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| PERFORMER                          | 1969   | 1970   | 1971   | 1972   | 1973   | 1974   | 1975   | 1976   | 1977   | ESTIMATES |        |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
|                                    |        |        |        |        |        |        |        |        |        | 1978      | 1979   |
| TOTAL.....                         | 15,641 | 15,340 | 15,545 | 16,498 | 16,800 | 17,415 | 18,988 | 20,724 | 23,929 | 26,419    | 27,972 |
| FEDERAL INTRAMURAL(1).....         | 3,503  | 3,855  | 4,156  | 4,482  | 4,619  | 4,815  | 5,397  | 5,710  | 6,142  | 6,565     | 6,961  |
| INDUSTRIAL FIRMS(2).....           | 9,131  | 8,415  | 8,135  | 8,355  | 8,456  | 8,438  | 9,092  | 10,229 | 12,238 | 13,612    | 14,516 |
| UNIVERSITIES AND COLLEGES.....     | 1,529  | 1,473  | 1,644  | 1,902  | 1,916  | 2,215  | 2,394  | 2,526  | 2,886  | 3,408     | 3,665  |
| FFRDC'S ADMINISTERED BY            |        |        |        |        |        |        |        |        |        |           |        |
| UNIVERSITIES.....                  | 722    | 752    | 729    | 760    | 725    | 789    | 936    | 1,061  | 1,327  | 1,283     | 1,326  |
| OTHER NONPROFIT INSTITUTIONS(2)... | 605    | 706    | 677    | 733    | 763    | 879    | 910    | 924    | 1,046  | 1,199     | 1,178  |
| ALL OTHER PERFORMERS.....          | 151    | 139    | 204    | 266    | 321    | 279    | 259    | 275    | 291    | 353       | 346    |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE.

(2) INCLUDES FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) ADMINISTERED BY THIS SECTOR.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-122. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH, BY PERFORMER: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| PERFORMER                          | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |        |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--------|
|                                    |       |       |       |       |       |       |       |       |       | 1978      | 1979   |
| TOTAL.....                         | 4,735 | 5,217 | 5,500 | 5,841 | 5,915 | 6,510 | 7,077 | 7,873 | 8,841 | 9,858     | 10,483 |
| FEDERAL INTRAMURAL(1).....         | 1,856 | 1,863 | 1,899 | 1,943 | 2,096 | 2,309 | 2,499 | 2,868 | 3,037 | 3,260     | 3,413  |
| INDUSTRIAL FIRMS(2).....           | 969   | 1,226 | 1,255 | 1,271 | 1,283 | 1,247 | 1,461 | 1,547 | 1,813 | 2,140     | 2,318  |
| UNIVERSITIES AND COLLEGES.....     | 1,359 | 1,320 | 1,469 | 1,650 | 1,672 | 1,970 | 2,105 | 2,268 | 2,612 | 2,963     | 3,219  |
| FFRDC'S ADMINISTERED BY            |       |       |       |       |       |       |       |       |       |           |        |
| UNIVERSITIES.....                  | 335   | 383   | 359   | 398   | 355   | 374   | 426   | 549   | 671   | 663       | 694    |
| OTHER NONPROFIT INSTITUTIONS(2)... | 292   | 306   | 365   | 432   | 381   | 474   | 458   | 500   | 564   | 657       | 654    |
| ALL OTHER PERFORMERS.....          | 123   | 120   | 153   | 147   | 128   | 136   | 128   | 141   | 143   | 175       | 182    |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE.

(2) INCLUDES FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) ADMINISTERED BY THIS SECTOR.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-123. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY PERFORMER: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| PERFORMER                          | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |       |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|                                    |       |       |       |       |       |       |       |       |       | 1978      | 1979  |
| TOTAL.....                         | 1,779 | 1,762 | 1,779 | 1,974 | 2,001 | 2,076 | 2,279 | 2,425 | 2,894 | 3,292     | 3,637 |
| FEDERAL INTRAMURAL(1).....         | 516   | 541   | 491   | 538   | 537   | 611   | 682   | 719   | 866   | 975       | 1,046 |
| INDUSTRIAL FIRMS(2).....           | 211   | 205   | 182   | 166   | 213   | 139   | 138   | 152   | 234   | 277       | 323   |
| UNIVERSITIES AND COLLEGES.....     | 740   | 690   | 777   | 901   | 909   | 964   | 1,065 | 1,137 | 1,315 | 1,509     | 1,697 |
| FFRDC'S ADMINISTERED BY            |       |       |       |       |       |       |       |       |       |           |       |
| UNIVERSITIES.....                  | 219   | 237   | 228   | 254   | 229   | 222   | 258   | 284   | 323   | 346       | 373   |
| OTHER NONPROFIT INSTITUTIONS(2)... | 71    | 58    | 75    | 89    | 87    | 108   | 112   | 108   | 127   | 148       | 158   |
| ALL OTHER PERFORMERS.....          | 24    | 31    | 27    | 27    | 26    | 32    | 24    | 25    | 29    | 37        | 40    |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE.

(2) INCLUDES FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) ADMINISTERED BY THIS SECTOR.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-124. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY PERFORMER: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| PERFORMER                                    | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |       |
|----------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|                                              |       |       |       |       |       |       |       |       |       | 1978      | 1979  |
| TOTAL.....                                   | 4,950 | 3,055 | 3,720 | 3,867 | 3,914 | 4,435 | 4,798 | 5,448 | 5,947 | 6,565     | 6,866 |
| FEDERAL INTRAMURAL(1).....                   | 1,140 | 1,321 | 1,408 | 1,405 | 1,559 | 1,698 | 1,817 | 2,149 | 2,171 | 2,285     | 2,367 |
| INDUSTRIAL FIRMS(2).....                     | 759   | 1,021 | 1,073 | 1,105 | 1,071 | 1,100 | 1,323 | 1,395 | 1,579 | 1,862     | 1,995 |
| UNIVERSITIES AND COLLEGES.....               | 620   | 630   | 692   | 749   | 763   | 1,006 | 1,039 | 1,130 | 1,298 | 1,454     | 1,522 |
| FFRDC'S ADMINISTERED BY<br>UNIVERSITIES..... | 116   | 246   | 131   | 144   | 126   | 152   | 169   | 265   | 348   | 317       | 323   |
| OTHER NONPROFIT INSTITUTIONS(2)...           | 221   | 247   | 291   | 343   | 294   | 366   | 346   | 392   | 437   | 509       | 496   |
| ALL OTHER PERFORMERS.....                    | 101   | 90    | 126   | 123   | 101   | 105   | 104   | 116   | 115   | 139       | 143   |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE.

(2) INCLUDES FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) ADMINISTERED BY THIS SECTOR.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-125. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY PERFORMER: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| PERFORMER                                    | 1969   | 1970   | 1971   | 1972   | 1973   | 1974   | 1975   | 1976   | 1977   | ESTIMATES |        |
|----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
|                                              |        |        |        |        |        |        |        |        |        | 1978      | 1979   |
| TOTAL.....                                   | 10,906 | 10,123 | 10,045 | 10,657 | 10,685 | 10,904 | 11,911 | 12,850 | 15,088 | 16,562    | 17,490 |
| FEDERAL INTRAMURAL(1).....                   | 1,847  | 1,993  | 2,257  | 2,539  | 2,523  | 2,506  | 2,898  | 2,842  | 3,105  | 3,305     | 3,528  |
| INDUSTRIAL FIRMS(2).....                     | 8,161  | 7,189  | 6,880  | 7,084  | 7,173  | 7,191  | 7,631  | 8,682  | 10,425 | 11,472    | 12,198 |
| UNIVERSITIES AND COLLEGES.....               | 170    | 153    | 175    | 252    | 244    | 245    | 290    | 258    | 274    | 445       | 446    |
| FFRDC'S ADMINISTERED BY<br>UNIVERSITIES..... | 367    | 369    | 370    | 362    | 370    | 415    | 509    | 512    | 656    | 620       | 629    |
| OTHER NONPROFIT INSTITUTIONS(2)...           | 313    | 401    | 311    | 301    | 381    | 405    | 452    | 423    | 481    | 562       | 524    |
| ALL OTHER PERFORMERS.....                    | 20     | 19     | 51     | 119    | 194    | 143    | 131    | 133    | 148    | 176       | 164    |

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE.

(2) INCLUDES FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) ADMINISTERED BY THIS SECTOR.

SOURCE: NATIONAL SCIENCE FOUNDATION.



TABLE C-126. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH, BY FIELD OF SCIENCE: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| FIELD OF SCIENCE                       | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |        |
|----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--------|
|                                        |       |       |       |       |       |       |       |       |       | 1978      | 1979   |
| TOTAL, ALL FIELDS.....                 | 4,735 | 5,211 | 5,500 | 5,841 | 5,915 | 6,510 | 7,077 | 7,873 | 8,841 | 9,858     | 10,483 |
| LIFE SCIENCES.....                     | 1,462 | 1,507 | 1,640 | 1,904 | 1,858 | 2,283 | 2,450 | 2,646 | 3,019 | 3,383     | 3,507  |
| PSYCHOLOGY.....                        | 101   | 112   | 111   | 121   | 112   | 143   | 145   | 140   | 159   | 178       | 200    |
| PHYSICAL SCIENCES.....                 | 1,002 | 893   | 874   | 946   | 944   | 990   | 1,072 | 1,221 | 1,511 | 1,694     | 1,819  |
| ENVIRONMENTAL SCIENCES.....            | 436   | 476   | 527   | 561   | 578   | 634   | 733   | 770   | 921   | 1,012     | 1,110  |
| MATHEMATICS AND COMPUTER SCIENCES..... | 113   | 101   | 119   | 136   | 124   | 127   | 136   | 153   | 176   | 198       | 230    |
| ENGINEERING.....                       | 1,326 | 1,847 | 1,824 | 1,726 | 1,712 | 1,883 | 2,051 | 2,378 | 2,426 | 2,665     | 2,791  |
| SOCIAL SCIENCES.....                   | 214   | 209   | 304   | 310   | 296   | 291   | 303   | 390   | 443   | 530       | 557    |
| OTHER SCIENCES NEC.....                | 80    | 72    | 100   | 114   | 190   | 160   | 187   | 175   | 186   | 194       | 269    |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-127. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY FIELD OF SCIENCE: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| FIELD OF SCIENCE                       | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |       |
|----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|                                        |       |       |       |       |       |       |       |       |       | 1978      | 1979  |
| TOTAL, ALL FIELDS.....                 | 1,779 | 1,762 | 1,779 | 1,974 | 2,001 | 2,076 | 2,279 | 2,425 | 2,894 | 3,292     | 3,637 |
| LIFE SCIENCES.....                     | 539   | 554   | 574   | 668   | 669   | 737   | 797   | 878   | 1,021 | 1,167     | 1,299 |
| PSYCHOLOGY.....                        | 53    | 56    | 44    | 54    | 46    | 49    | 60    | 44    | 54    | 64        | 74    |
| PHYSICAL SCIENCES.....                 | 864   | 589   | 582   | 625   | 618   | 640   | 702   | 722   | 874   | 978       | 1,068 |
| ENVIRONMENTAL SCIENCES.....            | 235   | 256   | 280   | 291   | 299   | 320   | 339   | 355   | 456   | 512       | 567   |
| MATHEMATICS AND COMPUTER SCIENCES..... | 56    | 58    | 51    | 63    | 57    | 49    | 59    | 70    | 79    | 89        | 101   |
| ENGINEERING.....                       | 151   | 180   | 169   | 185   | 204   | 189   | 234   | 240   | 303   | 346       | 374   |
| SOCIAL SCIENCES.....                   | 71    | 64    | 70    | 80    | 78    | 73    | 73    | 85    | 95    | 117       | 128   |
| OTHER SCIENCES NEC.....                | 11    | 4     | 9     | 9     | 28    | 19    | 15    | 33    | 12    | 20        | 25    |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-128. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY FIELD OF SCIENCE: FISCAL YEARS 1969-79

(MILLIONS OF DOLLARS)

| FIELD OF SCIENCE                       | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977  | ESTIMATES |       |
|----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|                                        |       |       |       |       |       |       |       |       |       | 1978      | 1979  |
| TOTAL, ALL FIELDS.....                 | 4,956 | 3,455 | 3,720 | 3,867 | 3,914 | 4,435 | 4,798 | 5,448 | 5,947 | 6,565     | 6,846 |
| LIFE SCIENCES.....                     | 923   | 953   | 1,066 | 1,238 | 1,289 | 1,546 | 1,653 | 1,768 | 1,999 | 2,216     | 2,208 |
| PSYCHOLOGY.....                        | 48    | 56    | 67    | 68    | 66    | 93    | 85    | 97    | 105   | 114       | 126   |
| PHYSICAL SCIENCES.....                 | 346   | 304   | 292   | 341   | 326   | 349   | 370   | 499   | 637   | 718       | 751   |
| ENVIRONMENTAL SCIENCES.....            | 201   | 221   | 247   | 270   | 279   | 313   | 393   | 416   | 465   | 500       | 583   |
| MATHEMATICS AND COMPUTER SCIENCES..... | 57    | 43    | 68    | 74    | 67    | 77    | 78    | 83    | 97    | 109       | 129   |
| ENGINEERING.....                       | 1,175 | 1,067 | 1,655 | 1,540 | 1,507 | 1,693 | 1,817 | 2,138 | 2,125 | 2,319     | 2,417 |
| SOCIAL SCIENCES.....                   | 143   | 144   | 234   | 231   | 218   | 218   | 231   | 305   | 349   | 413       | 428   |
| OTHER SCIENCES NEC.....                | 69    | 68    | 91    | 107   | 162   | 146   | 172   | 143   | 173   | 176       | 244   |

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-129. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION AND STATE: FISCAL YEARS 1968-77

(MILLIONS OF DOLLARS)

| DIVISION AND STATE        | 1968     | 1969     | 1970     | 1971     | 1972     | 1973     | 1974     | 1975     | 1976     | 1977     |
|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| TOTAL, ALL STATES.....    | 15,690.2 | 15,356.6 | 14,980.8 | 15,239.8 | 16,261.8 | 16,486.1 | 16,990.7 | 18,542.9 | 20,254.6 | 23,343.8 |
| NEW ENGLAND.....          | 1,009.4  | 1,085.7  | 1,000.8  | 1,148.8  | 1,259.8  | 1,264.4  | 1,561.8  | 1,649.5  | 1,715.5  | 1,963.0  |
| CONNECTICUT.....          | 133.2    | 223.6    | 160.0    | 149.9    | 169.2    | 193.9    | 233.7    | 269.6    | 239.4    | 291.7    |
| MAINE.....                | 6.0      | 14.3     | 13.3     | 13.6     | 16.3     | 9.6      | 10.5     | 11.4     | 15.3     | 18.0     |
| MASSACHUSETTS.....        | 795.7    | 775.0    | 763.9    | 887.0    | 961.2    | 953.6    | 1,180.3  | 1,228.6  | 1,284.9  | 1,474.4  |
| NEW HAMPSHIRE.....        | 36.6     | 31.0     | 27.3     | 34.0     | 21.5     | 30.6     | 29.3     | 33.5     | 34.6     | 32.5     |
| RHODE ISLAND.....         | 31.1     | 32.8     | 29.9     | 50.5     | 68.9     | 59.3     | 74.9     | 75.0     | 101.6    | 109.9    |
| VERMONT.....              | 6.8      | 9.0      | 9.5      | 13.7     | 22.8     | 17.5     | 25.1     | 31.4     | 39.5     | 36.4     |
| MIDDLE ATLANTIC.....      | 2,473.4  | 2,436.1  | 2,516.9  | 2,413.5  | 2,481.0  | 2,206.7  | 2,160.2  | 2,280.0  | 2,437.6  | 2,606.5  |
| NEW JERSEY.....           | 681.8    | 708.9    | 742.5    | 745.1    | 763.1    | 645.2    | 473.8    | 441.9    | 495.6    | 566.2    |
| NEW YORK.....             | 1,174.9  | 1,107.0  | 1,235.6  | 1,119.5  | 1,075.6  | 932.6    | 1,026.3  | 1,057.4  | 1,106.1  | 1,202.8  |
| PENNSYLVANIA.....         | 616.7    | 620.3    | 538.8    | 548.9    | 642.3    | 628.8    | 660.1    | 780.7    | 836.0    | 837.5    |
| EAST NORTH CENTRAL.....   | 1,294.0  | 1,046.3  | 1,038.8  | 1,121.7  | 1,179.6  | 1,082.8  | 1,263.8  | 1,375.4  | 1,437.3  | 1,724.0  |
| ILLINOIS.....             | 239.3    | 251.2    | 239.6    | 249.1    | 291.0    | 287.6    | 325.4    | 371.1    | 414.0    | 517.0    |
| INDIANA.....              | 82.9     | 108.8    | 91.9     | 74.6     | 100.5    | 82.9     | 95.0     | 92.7     | 92.3     | 102.7    |
| MICHIGAN.....             | 203.4    | 167.4    | 162.8    | 187.3    | 186.3    | 153.8    | 196.6    | 247.8    | 221.0    | 315.4    |
| OHIO.....                 | 653.6    | 432.6    | 457.3    | 518.1    | 521.7    | 478.8    | 567.3    | 586.8    | 627.4    | 694.4    |
| WISCONSIN.....            | 114.8    | 84.2     | 87.1     | 92.6     | 80.1     | 79.6     | 79.6     | 79.0     | 82.5     | 96.5     |
| WEST NORTH CENTRAL.....   | 921.1    | 328.5    | 475.4    | 789.0    | 906.0    | 830.8    | 607.4    | 571.2    | 678.2    | 971.2    |
| IOWA.....                 | 41.7     | 34.2     | 32.7     | 32.9     | 37.9     | 38.5     | 46.5     | 47.3     | 47.9     | 59.4     |
| KANSAS.....               | 19.8     | 39.6     | 10.6     | 24.3     | 31.3     | 30.4     | 29.4     | 32.8     | 32.0     | 36.2     |
| MINNESOTA.....            | 111.1    | 89.3     | 109.3    | 162.8    | 127.0    | 120.2    | 106.9    | 123.0    | 153.0    | 186.2    |
| MISSOURI.....             | 121.1    | 161.9    | 291.2    | 586.9    | 679.5    | 608.1    | 387.0    | 329.1    | 403.3    | 638.4    |
| NEBRASKA.....             | 15.4     | 11.3     | 10.6     | 10.4     | 11.7     | 13.4     | 14.7     | 20.0     | 21.0     | 24.1     |
| NORTH DAKOTA.....         | 6.0      | 6.8      | 8.9      | 9.1      | 10.5     | 9.5      | 10.5     | 12.6     | 14.3     | 18.7     |
| SOUTH DAKOTA.....         | 6.0      | 5.4      | 6.1      | 9.6      | 8.1      | 7.0      | 12.4     | 6.4      | 6.8      | 8.0      |
| SOUTH ATLANTIC.....       | 2,819.7  | 2,961.3  | 2,899.2  | 3,224.6  | 3,560.6  | 3,706.2  | 3,752.8  | 3,989.8  | 4,224.9  | 4,675.4  |
| DELAWARE.....             | 13.9     | 16.1     | 16.3     | 13.0     | 17.4     | 40.8     | 10.4     | 10.0     | 7.9      | 15.3     |
| DISTRICT OF COLUMBIA..... | 443.2    | 444.3    | 468.5    | 478.2    | 462.1    | 490.0    | 552.3    | 579.8    | 570.2    | 729.6    |
| FLORIDA.....              | 799.1    | 884.5    | 824.8    | 890.4    | 1,022.5  | 952.0    | 783.2    | 796.8    | 788.1    | 919.1    |
| GEORGIA.....              | 280.7    | 276.8    | 72.3     | 78.8     | 71.9     | 66.8     | 70.9     | 80.8     | 91.9     | 110.8    |
| MARYLAND.....             | 905.9    | 961.8    | 1,063.4  | 1,201.2  | 1,318.1  | 1,434.8  | 1,528.9  | 1,609.3  | 1,810.1  | 2,030.2  |
| NORTH CAROLINA.....       | 62.4     | 58.5     | 63.8     | 82.7     | 83.3     | 101.9    | 110.0    | 116.9    | 139.1    | 154.7    |
| SOUTH CAROLINA.....       | 18.7     | 17.1     | 17.8     | 23.4     | 26.3     | 23.7     | 28.8     | 24.5     | 30.7     | 67.0     |
| VIRGINIA.....             | 275.2    | 286.3    | 352.7    | 424.9    | 529.6    | 567.9    | 642.3    | 726.0    | 750.6    | 799.2    |
| WEST VIRGINIA.....        | 20.6     | 16.0     | 19.6     | 32.1     | 29.4     | 28.2     | 25.9     | 45.7     | 36.4     | 49.7     |
| EAST SOUTH CENTRAL.....   | 655.3    | 597.5    | 599.7    | 618.2    | 638.9    | 681.5    | 724.7    | 770.4    | 919.5    | 1,131.0  |
| ALABAMA.....              | 405.7    | 358.4    | 357.2    | 360.0    | 359.0    | 376.5    | 377.4    | 363.6    | 374.4    | 433.6    |
| KENTUCKY.....             | 24.1     | 21.4     | 20.4     | 23.0     | 32.1     | 38.1     | 31.3     | 34.9     | 50.7     | 56.2     |
| MISSISSIPPI.....          | 26.5     | 26.0     | 28.3     | 46.7     | 60.6     | 57.5     | 76.3     | 57.7     | 71.4     | 95.2     |
| TENNESSEE.....            | 199.1    | 191.6    | 193.8    | 188.5    | 187.1    | 209.5    | 241.7    | 314.2    | 423.0    | 546.0    |
| WEST SOUTH CENTRAL.....   | 1,188.9  | 894.3    | 834.9    | 733.1    | 798.9    | 794.0    | 772.1    | 872.3    | 1,019.7  | 1,124.9  |
| ARKANSAS.....             | 8.1      | 7.4      | 9.8      | 20.8     | 13.2     | 16.6     | 14.2     | 23.3     | 26.5     | 24.3     |
| LOUISIANA.....            | 272.4    | 171.8    | 146.5    | 90.1     | 103.6    | 91.6     | 75.7     | 101.7    | 125.9    | 156.4    |
| OKLAHOMA.....             | 24.0     | 20.1     | 29.5     | 26.3     | 29.1     | 34.8     | 29.9     | 34.2     | 31.7     | 47.7     |
| TEXAS.....                | 884.4    | 695.0    | 649.1    | 595.9    | 653.0    | 651.0    | 652.2    | 713.1    | 835.6    | 896.5    |
| MOUNTAIN.....             | 1,093.6  | 1,136.7  | 1,136.8  | 1,127.4  | 1,214.9  | 1,290.6  | 1,213.0  | 1,274.2  | 1,392.8  | 1,719.2  |
| ARIZONA.....              | 71.4     | 79.2     | 72.8     | 68.7     | 89.9     | 94.8     | 99.5     | 115.7    | 121.8    | 141.9    |
| COLORADO.....             | 205.3    | 264.4    | 274.1    | 264.2    | 369.1    | 410.8    | 323.3    | 266.6    | 247.1    | 322.5    |
| IDAHO.....                | 65.0     | 69.6     | 75.0     | 75.3     | 75.9     | 81.8     | 52.2     | 66.3     | 71.7     | 118.7    |
| MONTANA.....              | 8.3      | 8.3      | 11.6     | 17.6     | 19.0     | 19.9     | 13.6     | 26.5     | 27.6     | 45.5     |
| NEVADA.....               | 223.6    | 232.3    | 190.9    | 159.0    | 140.3    | 143.1    | 112.5    | 149.4    | 179.0    | 183.5    |
| NEW MEXICO.....           | 413.3    | 426.3    | 444.1    | 458.7    | 451.5    | 462.8    | 532.0    | 554.3    | 625.8    | 750.9    |
| UTAH.....                 | 39.7     | 49.8     | 61.1     | 55.8     | 58.9     | 66.7     | 88.7     | 79.4     | 100.7    | 132.3    |
| WYOMING.....              | 6.4      | 6.8      | 7.2      | 8.1      | 9.9      | 10.7     | 11.0     | 14.0     | 19.1     | 23.9     |
| PACIFIC.....              | 4,774.3  | 4,813.5  | 4,404.1  | 4,004.9  | 4,158.2  | 4,562.0  | 4,864.3  | 5,687.8  | 6,363.8  | 7,162.2  |
| ALASKA.....               | 61.8     | 68.6     | 43.2     | 58.2     | 46.0     | 41.8     | 25.3     | 34.5     | 35.4     | 35.8     |
| CALIFORNIA.....           | 4,298.8  | 4,289.8  | 3,871.1  | 3,295.4  | 3,473.1  | 3,840.1  | 4,075.7  | 4,837.6  | 5,493.7  | 6,106.8  |
| HAWAII.....               | 35.0     | 37.7     | 43.8     | 38.3     | 47.4     | 47.9     | 53.1     | 43.0     | 45.5     | 36.9     |
| OREGON.....               | 35.0     | 36.1     | 33.8     | 41.9     | 53.7     | 64.3     | 59.9     | 78.5     | 84.1     | 84.3     |
| WASHINGTON.....           | 343.9    | 381.2    | 412.2    | 571.2    | 537.9    | 567.9    | 650.4    | 694.2    | 705.1    | 878.6    |
| OUTLYING AREAS.....       | 12.8     | 11.6     | 17.3     | 18.6     | 18.4     | 19.7     | 19.6     | 28.7     | 22.3     | 47.7     |
| OFFICES ABROAD.....       | 47.6     | 45.1     | 56.8     | 62.9     | 46.1     | 47.4     | 49.1     | 43.6     | 43.0     | 38.6     |

NOTE: THE OBLIGATIONS OF THE R&amp;D-SUPPORT AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF THE TOTAL FEDERAL R&amp;D OBLIGATIONS THROUGHOUT THE 1968-77 PERIOD.

SOURCE: NATIONAL SCIENCE FOUNDATION.

TABLE C-130. FEDERAL OBLIGATIONS FOR R&amp;D PLANT, BY GEOGRAPHIC DIVISION AND STATE: FISCAL YEARS 1960-77

| (MILLIONS OF DOLLARS)     |       |       |       |       |       |       |       |       |       |         |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| DIVISION AND STATE        | 1960  | 1969  | 1970  | 1971  | 1972  | 1973  | 1974  | 1975  | 1976  | 1977    |
| TOTAL, ALL STATES.....    | 599.8 | 663.5 | 519.8 | 586.0 | 595.6 | 757.5 | 749.9 | 801.1 | 799.2 | 1,334.0 |
| NEW ENGLAND.....          | 55.9  | 28.3  | 15.0  | 15.7  | 24.5  | 15.5  | 17.7  | 22.7  | 22.4  | 36.1    |
| CONNECTICUT.....          | 8.8   | 1.4   | 2.8   | 1.5   | 2.7   | 2.4   | 5.2   | 3.8   | 1.9   | 3.9     |
| MAINE.....                | .1    | .1    | .1    | -     | .4    | .1    | .2    | .1    | .1    | .1      |
| MASSACHUSETTS.....        | 45.2  | 25.5  | 10.7  | 9.7   | 16.1  | 8.4   | 9.5   | 11.0  | 14.0  | 24.4    |
| NEW HAMPSHIRE.....        | .6    | .1    | .1    | 2.0   | 1.5   | .4    | 1.1   | 2.9   | 2.0   | 2.4     |
| RHODE ISLAND.....         | .9    | .9    | 1.3   | 2.1   | 2.8   | 4.2   | .7    | 4.9   | 4.5   | 5.3     |
| VERMONT.....              | .2    | .4    | .1    | .4    | 1.1   | .1    | 1.0   | -     | -     | -       |
| MIDDLE ATLANTIC.....      | 73.6  | 76.1  | 51.5  | 55.7  | 74.1  | 99.7  | 101.4 | 76.8  | 70.6  | 133.9   |
| NEW JERSEY.....           | 11.7  | 7.8   | 5.6   | 5.0   | 14.9  | 5.3   | 2.5   | 11.5  | 22.1  | 64.8    |
| NEW YORK.....             | 43.7  | 43.7  | 26.7  | 33.9  | 21.9  | 81.8  | 77.1  | 46.4  | 37.5  | 81.0    |
| PENNSYLVANIA.....         | 18.2  | 24.6  | 19.2  | 16.8  | 37.3  | 12.6  | 21.8  | 18.9  | 11.0  | 8.1     |
| EAST NORTH CENTRAL.....   | 62.1  | 86.9  | 119.9 | 100.1 | 85.5  | 129.7 | 69.7  | 48.3  | 66.5  | 114.6   |
| ILLINOIS.....             | 31.4  | 47.0  | 94.7  | 85.2  | 68.1  | 84.3  | 42.9  | 29.6  | 45.2  | 52.0    |
| INDIANA.....              | 3.6   | .9    | .4    | .8    | .5    | .3    | .1    | .1    | .8    | .6      |
| MICHIGAN.....             | 3.3   | 5.1   | 3.8   | .9    | 2.9   | 4.8   | .2    | .6    | 2.0   | 1.1     |
| OHIO.....                 | 20.7  | 32.6  | 20.3  | 10.1  | 13.0  | 39.1  | 19.6  | 15.1  | 13.6  | 60.4    |
| WISCONSIN.....            | 3.1   | 5.7   | .6    | 3.1   | 1.0   | 1.1   | 6.9   | 2.9   | 4.9   | .5      |
| WEST NORTH CENTRAL.....   | 14.2  | 12.7  | 9.3   | 10.8  | 8.1   | 4.7   | 26.9  | 5.8   | 3.6   | 3.6     |
| IOWA.....                 | 7.3   | 1.8   | 1.2   | 1.5   | .8    | 1.1   | .5    | .7    | 1.1   | 1.5     |
| KANSAS.....               | .7    | 3.9   | .1    | .2    | .1    | .2    | .1    | .1    | .1    | .1      |
| MINNESOTA.....            | 3.3   | 1.1   | .8    | 4.1   | 1.3   | .5    | 23.4  | .1    | .5    | .4      |
| MISSOURI.....             | .7    | 1.3   | 9.2   | 2.2   | .7    | .3    | .8    | 4.1   | .5    | .9      |
| NEBRASKA.....             | 1.1   | 3.5   | .9    | 1.2   | 1.6   | 1.0   | 1.5   | .4    | 1.0   | .2      |
| NORTH DAKOTA.....         | .5    | .6    | .1    | .1    | .5    | .1    | .2    | .4    | .5    | .6      |
| SOUTH DAKOTA.....         | .8    | .5    | 2.1   | 1.5   | 3.1   | 1.5   | .4    | -     | -     | .6      |
| SOUTH ATLANTIC.....       | 157.2 | 115.7 | 72.3  | 77.0  | 114.1 | 142.9 | 140.5 | 173.7 | 166.9 | 358.5   |
| DELAWARE.....             | .5    | .1    | .1    | -     | .1    | .1    | .1    | .1    | -     | .1      |
| DISTRICT OF COLUMBIA..... | 14.5  | 8.3   | 6.4   | 5.1   | 9.0   | 31.5  | 1.1   | 7.9   | 21.4  | 11.3    |
| FLORIDA.....              | 76.9  | 57.5  | 33.2  | 30.8  | 47.7  | 40.1  | 51.7  | 96.0  | 76.3  | 155.2   |
| GEORGIA.....              | 4.0   | 2.3   | 2.0   | 2.3   | 1.8   | .7    | .1    | .5    | .2    | 1.2     |
| MARYLAND.....             | 36.6  | 30.6  | 20.3  | 29.7  | 36.1  | 51.4  | 60.8  | 40.1  | 36.7  | 80.4    |
| NORTH CAROLINA.....       | 3.6   | 4.5   | 3.1   | .4    | 6.0   | 4.8   | 4.1   | .3    | .6    | 66.8    |
| SOUTH CAROLINA.....       | 1.5   | 3.2   | 1.8   | 1.3   | 1.2   | 3.4   | 7.7   | 3.8   | 3.3   | 2.2     |
| VIRGINIA.....             | 15.8  | 4.0   | 3.5   | 7.0   | 11.3  | 7.0   | 14.0  | 23.1  | 11.6  | 24.7    |
| WEST VIRGINIA.....        | 3.7   | 5.3   | 1.9   | .4    | .9    | 4.2   | .8    | 1.9   | 16.7  | 16.7    |
| EAST SOUTH CENTRAL.....   | 18.0  | 30.7  | 16.8  | 18.3  | 27.7  | 55.4  | 54.7  | 52.5  | 76.9  | 54.7    |
| ALABAMA.....              | 2.2   | 6.2   | 1.8   | 3.9   | 6.7   | 5.1   | 5.6   | 8.4   | 12.3  | 5.3     |
| KENTUCKY.....             | .3    | .4    | .8    | .3    | .1    | .1    | .2    | -     | -     | -       |
| MISSISSIPPI.....          | 3.7   | .2    | .8    | .4    | .6    | 13.0  | 15.2  | 4.8   | 4.1   | 11.5    |
| TENNESSEE.....            | 11.7  | 24.0  | 13.4  | 13.7  | 20.5  | 37.4  | 33.6  | 39.3  | 60.5  | 37.8    |
| WEST SOUTH CENTRAL.....   | 17.3  | 8.0   | 9.4   | 11.7  | 11.2  | 11.9  | 8.2   | 8.9   | 11.1  | 17.2    |
| ARKANSAS.....             | .2    | -     | .1    | .1    | .1    | .2    | .4    | .7    | .9    | 2.8     |
| LOUISIANA.....            | 1.5   | .5    | 1.1   | 5.1   | .5    | .4    | 1.6   | .3    | 2.3   | 3.6     |
| OKLAHOMA.....             | .2    | .9    | .1    | .1    | .2    | .1    | .1    | .3    | .2    | .4      |
| TEXAS.....                | 15.3  | 6.5   | 6.1   | 6.5   | 10.4  | 11.1  | 6.1   | 7.6   | 7.8   | 10.4    |
| MOUNTAIN.....             | 77.8  | 135.3 | 114.4 | 134.4 | 84.1  | 95.5  | 86.2  | 104.9 | 123.8 | 195.6   |
| ARIZONA.....              | 10.9  | 2.0   | 1.6   | 1.3   | 2.3   | .5    | 3.6   | 1.3   | 2.7   | 1.4     |
| COLORADO.....             | 2.8   | 4.3   | 5.2   | 8.2   | 16.2  | 21.9  | 7.9   | 4.9   | 12.0  | 12.7    |
| IDAHO.....                | 8.8   | 31.0  | 23.0  | 20.3  | 5.4   | 8.3   | 11.0  | 16.8  | 19.7  | 26.1    |
| MONTANA.....              | .2    | .5    | .1    | .5    | .1    | .1    | .1    | .3    | .1    | .8      |
| NEVADA.....               | 11.0  | 17.1  | 17.2  | 16.9  | 17.5  | 14.4  | 9.2   | 11.7  | 11.7  | 14.8    |
| NEW MEXICO.....           | 43.2  | 77.5  | 62.6  | 54.1  | 41.6  | 51.6  | 50.3  | 68.1  | 76.6  | 137.9   |
| UTAH.....                 | .3    | 2.9   | 1.0   | .6    | 1.0   | .5    | 4.1   | 2.1   | .8    | 1.5     |
| WYOMING.....              | .1    | .1    | .6    | .4    | .1    | .2    | .1    | .3    | .2    | .3      |
| PACIFIC.....              | 114.9 | 145.0 | 104.4 | 178.3 | 156.3 | 176.7 | 243.8 | 305.9 | 256.1 | 417.8   |
| ALASKA.....               | 2.1   | 3.0   | .5    | 1.4   | .7    | .5    | .1    | .9    | .8    | .6      |
| CALIFORNIA.....           | 92.2  | 121.2 | 85.9  | 119.8 | 123.4 | 128.8 | 141.1 | 151.1 | 147.3 | 303.3   |
| HAWAII.....               | 3.7   | .8    | .5    | 2.2   | .9    | .4    | .4    | 6.2   | 2.8   | .5      |
| OREGON.....               | 2.4   | 1.5   | 2.3   | 1.2   | 1.2   | .1    | .1    | 1.2   | 2.0   | .1      |
| WASHINGTON.....           | 14.6  | 18.6  | 15.3  | 53.7  | 30.2  | 47.8  | 102.1 | 146.5 | 103.1 | 113.4   |
| OUTLYING AREAS.....       | 7.2   | 4.6   | 3.5   | 5.2   | 1.8   | 1.4   | .6    | .5    | .3    | .1      |
| OFFICES ABROAD.....       | 1.0   | 20.7  | 5.3   | 10.8  | 8.2   | 24.1  | .2    | 1.1   | 1.0   | 1.9     |

\* INDICATES AMOUNT LESS THAN \$50,000.

NOTE: THE OBLIGATIONS OF THE R&amp;D-PLANT-SUPPORT AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 97 PERCENT OF TOTAL FEDERAL R&amp;D PLANT OBLIGATIONS THROUGHOUT THE 1960-77 PERIOD.

SOURCE: NATIONAL SCIENCE FOUNDATION.